

# CA JOURNAL

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## North Atlantic Aviation Service Topic at Dublin

Fifty United States aviation experts from Federal organizations and airlines are attending the conference at Dublin, Ireland, to determine standard operating procedures for North Atlantic air services.

Headed by Gerald B. Brophy, U. S. delegate and Chief of Mission, and with Charles I. Stanton, Deputy Administrator of the Civil Aeronautics Administration as Chief of the Technical Staff, there will be 23 official delegates representing the State Department, Civil Aeronautics Board, the CAA, War and Navy Departments, Coast and Geodetic Survey, Federal Communications Commission and the Maritime Commission.

**Industry's Representation**—Industry representatives on the official delegation come from Aeronautical Radio, the airlines' mutual radio organization, the Air Transport Association, Transcontinental and Western Air, Pan American Airlines, and American Overseas Airlines.

Twenty-two non-delegation observers from government agencies and private companies also will attend the conference. Twelve Northern European nations and Spain and Portugal will take part in the conference. The conference convened March 4, to continue approximately four weeks.

Two principal purposes of the conference have been named by Glen A. Gilbert, Deputy Chief Technical Advisor of the delegation. They are to review and plan for the operation of the facilities necessary for air service along the North Atlantic route, and to agree on the necessary operating instructions as they are required to supplement the standards set up by the Provisional International Civil Aviation Organization.

**N. Atlantic Leads Way**—The North Atlantic region is the first to prepare for international conferences on these operating problems. The world has been divided by PICAO into ten such regions which will be considered separately in subsequent conferences. Circumstances vary in most regions and require different operating methods. The North Atlantic region probably will serve as the prototype for other ocean routes, such as the South Atlantic and certain Pacific routes.

(See North Atlantic Service, page 30)

## CAB Takes Action On International Rates

The Civil Aeronautics Board has approved the traffic conference machinery of the International Air Transport Association for a period of one year. Conditions of the Board's approval require that any rate agreement, or other action of the conference affecting air transportation, shall not be binding on American carriers unless the Civil Aeronautics Board shall have approved such agreements as being not adverse to the public interest.

**Board Answers**—In its opinion, the Board answered the contention of those who oppose participation of American international air carriers in the rate conference by saying: "We cannot accept without proof the proposition that the present resolution, which establishes the only presently available machinery whereby the United States Government, through this Board, can share and have a voice in the regulation of the rates of our international air carriers, is inconsistent with that policy of controlled competition which the Civil Aeronautics Act con-

(See CAB Action, page 29)

## CAA Survey Described As "Sound and Worthwhile Study"

Scope of interest commanded by the future of aviation developments in this country is revealed by the acceptance accorded "Civil Aviation and the National Economy," CAA's study covering possibilities during the next ten years.

For example, the publication recently was described in the New York Times Book Review as a "sound and worthwhile study" for anyone interested in the possibilities of civil aviation in the next decade. The Times' reviewer, Frederick Graham, continued with this statement: "And the Civil Aeronautics Administration is to be thanked for a much-needed survey of this sort."

Several colleges have informed the CAA Office of Aviation Information the book is proving very useful in their aeronautics classes.

The publication may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., for 55 cents.

## Air Jurisdiction Agreement Made At 2-Day Session

Complete agreement on major jurisdictional differences between the Civil Aeronautics Administration and state aeronautical bodies has been reached, T. P. Wright, Administrator of Civil Aeronautics, announces.

**Authority Boundaries Fixed**—A two-day meeting of representatives of the National Association of State Aviation Officials and the CAA resulted in clear definitions of the division of authority between the Federal and state governments on the problems of "policing the air" and punishment for reckless operation of aircraft.

The conferees agreed that the CAA will continue to enforce the regulations concerning airworthiness of aircraft, competency of airmen, operating standards, and air traffic rules, with the states cooperating in administering punishment for the reckless operation of aircraft in their jurisdiction.

The states will supplement the CAA enforcement of safe flying practices, and will have the power to "ground" the flier through court action. If the local court believes that the penalty should be greater than 30 days, it is recommended that the court inform the Civil Aeronautics Board immediately through the CAA so that the pilot's continued competency may be examined.

**States May Register Craft**—The CAA agreed that the states, if they so desire, may require the registration of aircraft and pilots if: the pilot registration fee is nominal; the aircraft registration fee is moderate, and where personal property taxes exist, is in full substitution for all state, county, and municipal property taxes on the aircraft. Possession of the appropriate effective Federal certificates and payment of the prescribed fees shall be the only requisites for state registration. It was further agreed that the penalty for failure to register under state laws should be a reasonable fine or term of imprisonment, but not "grounding."

Court actions on reckless flying should be recorded on the pilot's state registration certificate.

The CAA reaffirmed its position that it is the states' function to license airports, and the state officials presented for consideration and later action a list of standards to be applied to airports of less than Class 1

(See Air Agreement, page 32)

## Global Air Charting To Follow Standards Established by CAA

American pilots flying abroad will find familiar symbols and color markings on new aeronautical charts of much of the world, Kenneth Keefe, Chief of the Aeronautical Charts Section of the Civil Aeronautics Administration, announces.

**American Standard Adopted**—Because fliers of many Allied countries already were familiar with American-type aeronautical maps, it was decided at the international meeting in Montreal to base the World Aeronautical Charts on the standard American one-to-a-million-scale military aviation chart. Mr. Keefe was American alternate to Lt. Commander Jeremiah S. Morton of the Coast and Geodetic Survey on the subcommittee on Aeronautical Maps and Charts of the Provisional International Civil Aviation Organization.

"Some changes were necessary to meet special conditions found outside the United States," Mr. Keefe said. "For example, forest areas in England and much of Europe are sharply defined and permanent."

**Forests Shown in Green**—"Therefore, the committee recommended use of green to show these wooded areas on European charts, whereas green will continue to symbolize land areas close to sea level on most charts of this Hemisphere."

Towns marked with their names on roofs or other conspicuous spots—a project urged for years by the CAA—will have their names underlined with magenta on the world air maps. Markers outside of town limits will be indicated by an "M" in a square.

U. S. charts are prepared by the Coast and Geodetic Survey.

## Airplane Insurance Rate Cut; Hailed as Aid to Private Flying

Newly-announced low insurance rates for spin-proof airplanes are "a long step on the road to popular private flying," said John H. Geisse, assistant to the Administrator for Personal Flying Development, Civil Aeronautics Administration.

"Here is tangible, dollar-and-cents evidence that development of a safe airplane pays dividends, both to the manufacturer and the flier. This development points straight toward the methods we must pursue to help the family airplane take its rightful place in American social and economic life.

"Private flying will reach full development only when hazards have been cut to the barest minimum, and cost of private airplane ownership slashed to a point more comparable to the cost of operating the family automobile."

One aviation insurance underwriting firm recently announced a 25 percent reduction in hull insurance rates on a spin-proof 1945 plane "because of factors of design and safety in operation."

Hull insurance, which provides protection against hazards to the airplane itself, is about 85 percent of the private plane owner's total insurance bill. The announced rate reduction will save the owner of a spin-proof plane about \$110 annually.

### Route Change Is Asked

American Overseas Airlines has applied to the Civil Aeronautics Board for a change in the approved service plan so as to authorize service to Frankfurt, Germany. American also asks permission of substitute Oslo for Stavanger, Norway.

## Col. Elwell Resumes Job As CAA General Counsel

Colonel R. E. Elwell, who served in the Army Air Forces for three years, has resumed his position as General Counsel for the Civil Aeronautics Administration.

Glen D. Woodmansee, who carried on Colonel Elwell's duties during his military leave of absence, will continue in his former capacity of Assistant General Counsel. Colonel Elwell was commissioned late in 1942, and assigned to study Army Air Forces operational training accidents. Following a tour as Deputy Chief of the Operational Analysis Division, which took him to the Pacific and Mediterranean theatres,



Col. R. E. Elwell

he was sent to the U. S. Army Air Force headquarters in France.

He helped develop a system for air traffic control throughout Europe, based on the CAA system in this country, and later went to the Middle East to help organize a similar system. This military traffic control system provides an invaluable basis for a system to be used by American commercial operators in that area.

Colonel Elwell was born in England in 1895, coming to this country in 1910. He was attached to an A.E.F. ambulance unit in World War I, was naturalized in 1919, and later was graduated from the University of California and George Washington University.

He was associated with the late Anthony Fokker and with several aviation enterprises. After several years in private practice and in legal work for other government departments, he was appointed to the CAA in 1940.

President Roosevelt appointed him a member of the U. S. National Commission of the Permanent American Aeronautical Commission in 1941.

## Time Zone Scrapping Considered

Users of the nation's airways may no longer be confronted by the difficulty of computing time differences on flights that move from one time zone into another. A proposal being studied by the Civil Aeronautics Administration which provides for the adoption of Greenwich Civil Time as standard for continental United States, if approved, will end the time computing problem.

At present, civil aviation in the United States and Canada operates according to the local time zones—Eastern, Central, Mountain, and Pacific—and when a plane enters a new zone, its movement is recorded, and any messages concerning it are handled, according to the new time zone.

The Canadian Department of Civil Aviation also is considering the changeover to Greenwich Civil Time, used internationally in aviation and referred to as "International 'Z' Time."

Up to now, the huge task of speedily handling weather and traffic messages along the airways has been complicated by the need for conversion from one time zone to another. "GCT," now used on overseas flights, would save lots of time and trouble.

## Brazilians Anxious To Buy U. S. Planes CAA Official Says

Brazilians are fascinated by private flying and hungry for American airplanes, according to Cloyce J. Tippet, Senior Aviation Training Supervisor of the Civil Aeronautics Administration, assigned to Brazil.

Because of the shortage of planes, Mr. Tippet continued, "American manufacturers have a large light-plane market waiting for them in Brazil, which needs not only conventional planes but amphibians suitable for operation along the great Amazon River system. The Brazilians themselves manufacture a two-place plane called 'Paulistina', which looks much like a Piper Cub and uses a 65-horsepower American engine."

**Aero Clubs Popular**—"It seems as if everybody and his family belongs to an aero club in Brazil," Mr. Tippet said. "Unfortunately, there is more enthusiasm than there is flying, because so far the clubs haven't been able to get the planes they want. But with perhaps one or two old planes, each club is the social center of town."

Mr. Tippet's duties in Brazil included running a school to teach Brazilian flight instructors how to use American methods. Ten to sixteen instructors take the eight-week course at one time, using CAA manuals translated into Portuguese.

**CAB Regulations Adopted**—"As a matter of fact," he said, "the regulations for private flying in Brazil have been lifted verbatim from the CAB rules, thanks to a progressive Air Ministry which directs both military and civil aviation."

Aviation plays a larger part in Brazilian economy than it does in the United States, Mr. Tippet said, because the country lacks a major network of highways and railroads.

"The Brazilian commercial air fleet consists mostly of Lodestars, DC3's and Junkers. It is growing as rapidly as additional planes can be found, and carries not only passengers, but every kind of freight from hairpins to hounds.

"Brazilian students are quick and receptive, but are often handicapped by lack of mechanical background. This is being partially corrected by the big 'Escola Technica'—an aircraft technical training school as modern as any in the United States, with 200 American instructors and a capacity of 2,000 students.

"Brazilians plunge into flying with a spirit of challenge and complete lack of fear. Well trained, they are the equal of any fliers in the world. This is proved by the excellent Brazilian military record on submarine patrol and while flying Thunderbolts in Italy during the war.

"But while the average American boy takes the family car apart at the age of fifteen, the Brazilians have been thrown suddenly into contact with complicated modern machinery. They require a lot of training in fundamentals. As an example, thousands of young men in Brazil go to special schools to learn how to drive an automobile—something American youngsters learn almost instinctively.

**Accident Record**—"Accident figures for 1944 show 84 crashes on other than commercial airlines, out of approximately 500 civil airplanes of light training type flying that year. Personnel were blamed for 55 per cent of the accidents; material, 22.5 per cent; lack of maintenance, 16.5 per cent; and weather, 6 per cent. Remaining causes were undetermined.

"To improve the safety record, we're trying to give the Brazilian pilots a better knowledge of exactly what happens when they kick the rudder or open the throttle. Otherwise, they fly mechanically, without any 'feel' for what is happening to the plane. Flying

(See U. S. Planes, page 32)



## Weather Bureau Asks Boost in Appropriation To Aid Civil Aviation

International and domestic aviation would benefit by proposed expansion of Weather Bureau activities, for which an increase of a million and a half dollars is asked in the 1947 budget.

The proposed expansion would strengthen weather reporting on conditions along new and existing airways in the United States and Alaska, and improve the reports supplied to pilots by Civil Aeronautics Administration flight advisory units.

**Keeping Tabs on Typhoons**—In addition to 39 new stations in the United States, forecasting services are planned for San Juan, San Francisco, and Honolulu. The Honolulu station would collect radio data from ships and provide forecasts of the vast typhoon-ridden Pacific area, benefiting both planes and ships operating there.

The expansion would provide more complete weather coverage along the Eastern Seaboard of the United States, where commercial flying was suspended or reduced during the war, and civilian weather activities reduced accordingly. This coverage would aid not only airlines resuming service in Eastern areas, but also transatlantic flying services.

**Will Strengthen Arctic Services**—The Weather Bureau proposes to strengthen its Arctic services by taking over 13 Army stations in Alaska, in addition to one each in Puerto Rico, Haiti, and the Virgin Islands and three in continental United States.

An item for six new upper-air reporting stations, using balloon-carried radio transmitters, has been recommended by the Budget Bureau. Appropriation for an airplane to be used by the Weather Bureau in Alaska—the first such plane in the Bureau's history—is included. Planes were also used widely and successfully by the Army and Navy during the war to obtain weather information.

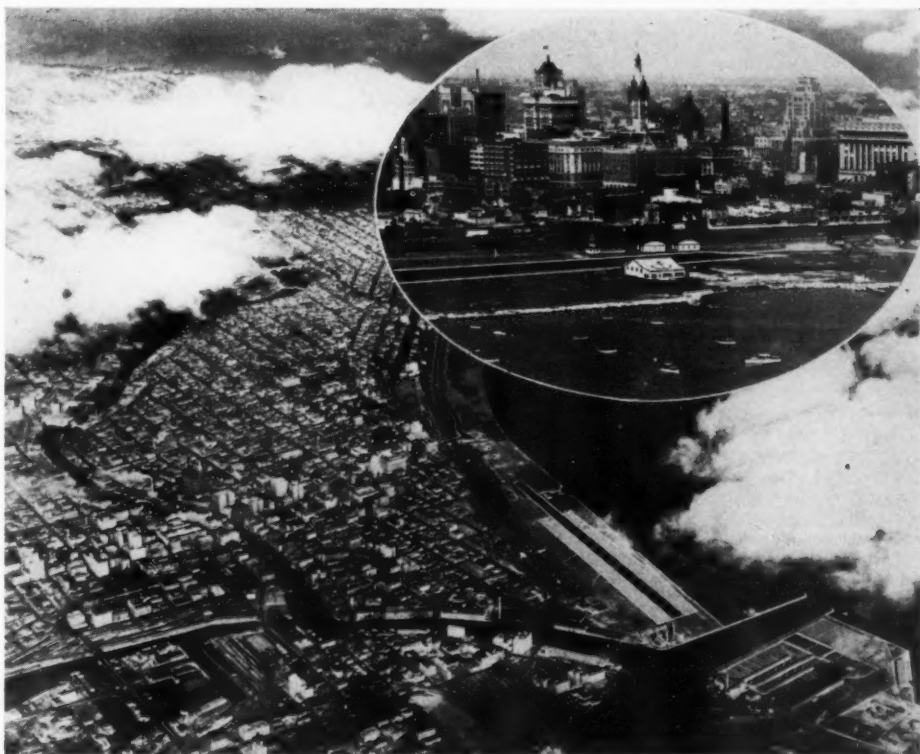
Aviation's importance in Weather Bureau plans is emphasized by the Budget Bureau with the statement that "expansion of the weather service has been due, in a large measure, to the increased requirements for civil aviation, and about two-thirds of the (proposed budget) increase is to establish facilities on proposed air routes and to expand the service to those existing."

**Chain of Stations Proposed**—More ambitious plans for a network of Arctic reporting stations are included in a bill by Senator Ralph O. Brewster of Maine. This bill, which has passed the Senate and has been favorably reported by a House Committee, would establish a chain of Arctic stations similar to the 137 stations operated by Russia on the Siberian shores of the Polar Sea and in the most northern islands of the Eastern Hemisphere.

Senator Brewster's proposals have the backing of the Weather Bureau, the CAA and the Army and Navy. A report by the House Committee on Agriculture, pointing out the value of the stations in short- and long-range weather forecasting, adds this comment:

"The Arctic Ocean offers no barrier, nor are the distances too great for military air operations . . . But to date we have no protection in this direction. A network of weather stations will not, of course, constitute military facilities, but they can serve as observational outposts and provide a basic knowledge for any activities which may be necessary in the future."

## Milwaukee Congratulated as Pioneer At Opening of Her 'Door-step' Airport



The new airport with a turfed strip 3000 feet long and 100 feet wide, is situated only a few hundred yards from the city's business district.

Civil Aeronautics Administration officials are watching with deep interest the pioneering activity of the City of Milwaukee in establishing the first "downtown" airplane facilities in any metropolitan area.

Established in September, the landing area located on Lake Michigan frontage a few hundred yards from the business district, is 3000 feet long and 500 feet wide, while the turfed strip is 3000 feet long and 100 feet wide.

Sponsored by the city through the activities of the progressive Milwaukee Citizens Committee on Aviation, the airport is operated under private management by A. C. Lang, a commercial operator. In spite of winter weather there has been considerable air operations by commuters, transients and businessmen who use private air transportation to meet their engagements.

Location of the strip, according to Francis J.

### Wright Warns CAA Employees Of Effect of Sulpha Drugs

T. P. Wright, Administrator of Civil Aeronautics, has called attention to the fact that internal use of sulpha compounds in the treatment of infections has a tendency to affect, temporarily, judgment or reflexes.

In a circular letter to all Civil Aeronautics Administration personnel, he says, "all employees in positions in which their actions can directly affect the safety of others, such as aircraft communicators, air traffic controllers, pilots or drivers of motor vehicles, and those who might jeopardize their own safety by climbing towers, should not be permitted to work in their regular positions while under the influence of such drugs."

Trecker, Chairman of the Milwaukee committee enables it to also utilize the already established seaplane landing ramp and thus provide two-fold air facilities.

Two T-hangers have been erected and others are to be added soon.

T. P. Wright, Administrator of Civil Aeronautics, has written to Mr. Trecker congratulating the city on pioneering the "door-step" airport and pointed out that scores of cities and towns in the United States have equal opportunity for establishing landing facilities adjacent to the business area either by reclaiming waste land or utilizing marginal areas.

### Over Half of Airport Fires Were Caused by Carelessness

More than half of the 174 ground fires at United States airports during the years 1942, '43 and '44 were caused by carelessness alone according to a report of the Safety Bureau of the Civil Aeronautics Board. The property loss for the three-year period was placed at \$1,360,000.

Aircraft to a total of 581 were damaged in the fires, 89 percent beyond repair, and the number of hangars and shops involved is given as 73. Three persons died in the fires started by carelessness, eight were seriously burned and eight others sustained minor injuries.

The Board issues the report in the form of a booklet in which are listed 12 precautionary measures to prevent ground fires at airports. The last, in a general way, summarizes the other 11. It recommends, "The entire premises be carefully inspected at regular, frequent intervals to detect and remedy any condition that might become a fire hazard."

# Personal Flying is Deciding Factor In World Leadership, Says Geisse

Development of private flying is the prime requisite in maintaining our world leadership John H. Geisse told members of the Baltimore Section of the Society of Automotive Engineers at their meeting in Baltimore. In his address, "Personal Flying for the Many," Mr. Geisse, who is Assistant to the Administrator of Civil Aeronautics for Personal Flying Development, placed particular emphasis on the need for immediate production.

**Importance of Private Flying**—"I have long been convinced that private flying is destined to become the major factor in aviation, exceeding both scheduled flying and flying by the services," said Mr. Geisse. "I have also been convinced that we will not be able to hold our position of leadership in world affairs, and I am not limiting them to aviation, unless private flying does attain such a position in this country.

"However, I have repeatedly stated that we can not have such a growth in personal flying unless two factors are favorable and I regret to say that these factors do not look too encouraging at this time.

"The first of these is national production—not production capacity, but production. Our production capacity was enormously increased during the war period. It remains for us to reach agreements in the field of distribution so we can get to work and utilize that new production capacity to the utmost."

**Full Employment Essential**—In reference to the need for full employment and commensurate consumption the speaker said:

"Competent authorities have stated that if we are to keep our people employed—and I am sure that they assumed a full day's work for a full day's pay—we would have to increase our consumption of consumer goods in the order of 50% over our consumption in 1939 and measured in 1939 dollars. We had similar increase in consumer expenditures between 1914 and 1929.

"It is a mistake to assume that personal flying is for the rich only and of no concern to the rest of us except insofar as it can provide jobs. If this were the case the amount of employment provided would indeed be small. But this is definitely not the case. All surveys have indicated most of our citizens want to participate in personal flying and it should be possible for them to do so. No change in the form of the income distribution curve is needed to make this possible. If there were a general rise in the income distribution curve families who were in the \$2,000 to \$2,500 income bracket would have an annual increase of from \$800 to \$1000 and if they were to devote 21.2% of this to personal flying it would amount to from \$168 to \$210 per year. This should be sufficient to pay for 37 hours of flight time, which is all that the pre-war pilot averaged. However, if this increase in income is not to be accompanied by an increase in production, then the cost of living will have a corresponding increase and these families will not be able to afford personal flying in the future any more than they could in the past. They can not pay more for their automobiles, more for their houses, more for their clothes, and more for their food and have anything left to spend on flying.

"The second factor is that of making personal flying worth its cost to more people. Here again the picture is not as bright as I would like to see it. Secretary Wallace, Assistant Secretary Burden, Administrator Wright and the Civil Aeronautics Board have gone about as far as they can toward accomplishing this objective. What remains to be done must be done by the citizens, by the operators, and by the manufacturers.

"The value of the airplane is just as dependent upon the availability of airports as the value of the automobile is dependent upon the availability of streets and highways. In a survey of those who had

discontinued personal flying it was found inaccessibility of airports ranked next to items of cost among reasons for discontinuance. Although some progress is being made today in correcting this unfortunate situation the picture is not altogether bright. The Civil Aeronautics Administration, because of lack of funds, is not in a position to supply all of the advice and counsel requested of it by the municipalities. The Federal airport bills which passed both houses of Congress last year are still tied up in conferences between the Senate and the House. This is retarding airport construction plans, as there is a natural inclination of all to wait for final approval of a bill as long as that remains a possibility."

**Old Arguments Revived**—Objection to airports Mr. Geisse pointed out is of the same pattern which was heard against automobiles and railroads. In this connection he said:

"But these are not the only headaches. Some 'public-spirited' citizens are adding more. They are placing the same obstacles in the path of the development of personal flying that they placed in the path of the development of our railroads and our automobiles. I recently heard of one case where not one of twenty airports proposed in a city could be constructed, due to objections of neighboring citizens.

"Conditions which have aroused this opposition to the establishment of airports can and will be corrected. In fact, there is no reason why these conditions should not be ruled out at any proposed airport right from the start. The first is unsightliness. This is not a characteristic of an airport—it is a characteristic of the operator. The airport can and should be as attractive as a neighboring park. Second is noise. Rules could be established relative to operations and permissible equipment which would make the noise no more objectionable than that from your street. Third might be hazard but for the most part this is a fiction of the imagination. Our accident records do not show that there is any great danger to neighboring property or persons. When sites are properly selected and operations properly controlled the hazard is negligible.

"Of equal importance to the problem of airports is the problem of making the airplane more suitable for the layman, and here again the CAA is sadly handicapped in what it can do to help. It could force developments in safety by regulation but I personally believe this to be undesirable. A much more effective course would be that of aiding industry in such developments. The CAA did request funds for this purpose for the fiscal year 1946-7 but it does not appear likely that they will be granted. The industry is about evenly divided between those who believe the Government should provide them assistance in their development work and those who do not. The latter contend industry will carry on the required development at a satisfactory rate without Government aid.

"I wish I could share this view but I can not. If correct, it will not be a case of history repeating itself. The Hammond Airplane, the first of the two control, spin-proof airplanes with tricycle undercarriage, was brought into being by a Government development program carried out in 1933. It could have been produced many years earlier by the industry if it had felt so inclined. But it was not. Now, however, with the Hammond having led the way,

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Henry A. Wallace  
Secretary of Commerce

Civil Aeronautics Administration  
T. P. Wright, Administrator

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PREPARED BY  
CAVIATION  
INFORMATION



Q—Where may I obtain practical information about flying a private airplane? I. J.

A—Answers to your inquiry will be found in "Path of Flight" issued by the Office of Aviation Information of the Civil Aeronautics Administration, a summary of which appears on page 36 of the Current issue of the CAA Journal. The ground covered by the booklet includes Aids to Navigation, Measurement of Direction, Basic Calculations, Chart Reading, Cross-Country Flying by Pilotage, The Wind Triangle, Radius of Flight and Special Problems. "Path of Flight" is for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. The price is 40 cents.

Q—Will airplanes in the near future be able to attain speeds substantially greater than is now possible? H. T.

A—The National Advisory Committee for Aeronautics predicts planes capable of making 1000 miles an hour will be developed within three years. The Committee also revealed it was investigating the possibility of making laboratory tests with small models at a speed of 4,200 miles an hour.

Q—Have figures on U. S. production of military airplanes been made public? N. S.

A—The War Production Board has disclosed 297,000 were constructed between July 1940 and July 1945.

others are following and we can expect more of this type in the near future. One plane of this type, developed before the war, is now outselling conventional types by a wide margin and this indication of public preference is having a profound effect.

**Chief Objection**—Mr. Geisse expressed confidence that the airplane propeller and engine can be silenced—thereby alleviating the cause for one of the main objections of citizens to airports in their vicinity.

"We can hope the industry will tackle this problem, not tomorrow but today, so we may at the earliest possible moment be in a position to demonstrate to our citizens that it has been solved and that future airplanes will not disturb their peace and quiet," he said.

"Another project to which we attached great importance was that of developing a roadable airplane. If such an airplane were now available it would answer the most serious airport problem, at least for

(See Personal Flying, page 31)

CIVIL AERONAUTICS JOURNAL



## CAA Speeds Work On VHF Radio Aids For Private Flying

Within two years, private fliers will have all the benefits of Very High Frequency radio flying aids. Scheduled airline pilots can now use VHF ranges on a considerable number of airways as airborne equipment, now available, is installed in their aircraft.

**Change to Be Gradual**—This transition from low to very high frequency will be beneficial and relatively painless to the private pilot, T. P. Wright, Administrator of Civil Aeronautics, has promised. No sudden change will be required in private aircraft radio equipment because airways facilities on the two frequencies will be operated simultaneously for a considerable time. As new planes are equipped with new radio equipment, the new facilities on the ground will be appearing. Moreover, due to progress in the industry, better and lighter airborne equipment is coming on the market, at prices equal to, and in some cases lower than, existing equipment.

Developments which have made practical the changeover from low to high frequencies in the communications and signals aids maintained by the Civil Aeronautics Administration have been completed at the CAA's Experimental Station at Indianapolis, and actual installation now is under way. Gradual transition along all the airways is expected to be completed in about two years.

VHF, which is above the static band in radio, vastly improves communications between ground and plane; gives all kinds of fliers better guidance across country; and is an essential and improved part of important flying aids such as approach control, instrument landing, and airway traffic control. Without VHF none of these facilities could be as helpful to fliers.

**Free from Static**—Another important advantage in the use of VHF is that 90 channels are available for aviation compared to the 60 that were available in low frequency, and these channels can be repeated more often within continental United States without interference. As far as the average pilot is concerned, however, VHF will be most welcomed for its freedom from static, a fault of the low frequency transmission that makes it uncomfortable, uncertain, and sometimes dangerous. Ability to "read" vital communications with certainty in times of bad weather conditions, when static is worst, will be an important contribution to air safety.

That part of the program of the CAA's Experimental Station at Indianapolis concerned with VHF includes the important omni-directional range, improvements on the CAA's standard instrument landing system, and continued work on communications equipment. VHF and radar are today the big words at Indianapolis.

**Services Will Continue**—Today, the private flier transmits to CAA ground stations on 3105 kilocycles, and listens to traffic control towers on 278 kilocycles. This equipment represents thousands of dollars investment, and it will not be disturbed. The CAA will continue to operate these services on these frequencies.

In addition, the existing low frequency ranges will be available for use by the private flier, since his receiver covers the 200-400 kilocycle band.

Any plane with this equipment has all CAA airway aids and communications facilities available, and they will be available for several years.

**Ultimate Change Necessary**—However, 400,000 to 500,000 airplanes within the next 10 years—if most forecasts are accurate—will produce a crowded condition about which something will have to be done. Anticipating the crowding of those radio channels,

## Radio Range Tower to Facilitate Service



This tower at Moshannon, Pa., is part of the VHF system.

the CAA has made plans for eventual and complete change to VHF equipment. Already, transmitters are installed on the ground which can be used by planes fitted with very high frequency equipment. This VHF equipment gives better results, and also relieves the 3105 kilocycle band which, in congested areas, is already crowded.

Radio manufacturers have plans to make the transition from low to VHF in a simple manner. They will build a five-channel transmitter covering the 131 megacycle band. Originally, only two frequencies will be covered in this transmitter, 131.9 kilocycles for communication from plane to traffic tower, and 131.7 kilocycles from plane to airways station. Later, as these channels become crowded, three other channels can be made operative by the simple ad-

dition to the transmitter of one crystal for each one.

**VHF Transmitters Installed**—On the ground, VHF transmitters for talking to planes, will be in the 118 megacycle band. Transmitters already are installed at CAA towers, and are being used to communicate with planes in congested areas in order to relieve the low frequency tower channels. At CAA airway stations, there will be transmitters on 111.1 megacycles.

The private flier now equipped with a receiver which covers the 200-400 kilocycle band, can get airways, airport traffic tower, radio range and weather transmissions.

CAA officials emphasize that no major, decisive or expensive changes will be required of the private pilot.

## CAA Issues Booklet to Help Job-seekers in Aviation Fields

Job possibilities in aviation are discussed in "Employment Outlook in Civil Aviation," a booklet issued by the Office of Aviation Information of the Civil Aeronautics Administration. The publication was prompted by the large number of questions about employment in this field which come to the CAA for answers.

Fixed-base operations will afford jobs for between 10,000 and 11,000 according to figures compiled by the Aeronautical Training Society after a canvass of its members. A considerable increase in the number employed in crop dusting and insect destruction is also expected.

Protection of forested areas by air patrols will also be a job source, as will inspection of power and oil lines. A steady increase in aerial photography is expected and it is believed the possibilities in lightweight air freight transportation will be greater than in any other commercial field.

"Employment Outlook in Civil Aviation" also contains chapters on "How to Start a Small Airport," "Information on the Small Airport," "How to Start a Flying School" and "How to Start an Aircraft and Engine Repair Shop." Lists of CAA Airport Superintendents and Engineers and Regional and District offices will also be found in the booklet which is for sale for 10 cents by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

## CAB Action

(Continued from first page)

templates. \* \* \* The competition contemplated by the Civil Aeronautics Act is not the unlimited and uncontrolled competition which permits destructive rates having no relation to the cost of operation but having the power to provoke subsidy wars among nations."

The Board further said it would renew its request to Congress to give the Board the same broad power over the rates of U. S. air carriers in foreign air transportation that it now possesses over our domestic airline rates.

**Lee Dissents**—Josh Lee, Board Member, dissented from the majority. Mr. Lee said: "The traffic conference agreement submitted to us herein is adverse to the public interest for the reason it is incompatible with the carefully established international air policy of the United States, and no sound reasons have been advanced why we should abandon this policy, permanently or temporarily. Our aviation policy in the international field has been founded on sound economic competition in all phases of air operations, and particularly in the determination of rates and charges, and by reason of the rate-making powers of the proposed traffic conferences the agreement creates the antithesis of a competitive system. Competition by consent is not competition." He concluded that "the safeguards proposed by the majority are not adequate to protect the public from the evils of the conference rate-making system."

# Control of Air Traffic is Discussed Before Scientists by Bert A. Denicke

Problems of air traffic regulation were discussed by Bert A. Denicke, acting technical assistant of Civil Aeronautics Administration Air Navigation Facility Operations Service in his recent address before the meeting of the Radio Technical Committee for Aeronautics.

**Contemplated Changes**—His subject was "Improvement of Air Traffic Control" and, after describing existing facilities and methods, he alluded briefly to contemplated changes as follows:

"The improvements which the Civil Aeronautics Administration now has under way will, when completed, assist materially in providing a more effective air traffic control service. However, these improvements, consisting of approach control, automatic communication systems and improved two-way radio and navigation facilities, constitute what might be called an 'interim program.' Beyond this program steps must be taken which include:

"Relieving pilots of distractions caused by present day traffic control requirements.

"Delegating to pilots substantial responsibility for the avoidance of collision between aircraft.

"Improving dependability and reliability of air transportation by providing an air traffic control service capable of handling traffic with a high degree of efficiency regardless of weather conditions."

**Safety Chief Concern**—Referring to the purpose and methods of air traffic control, Mr. Denicke said the basic reason is "the protection of life and property." He compared land and air control and called attention to a fundamental difference when he said: "Air traffic cannot be controlled like surface traffic, which is stopped by a red traffic light. Airplanes must remain in motion at sufficient speed to maintain altitude and maneuverability. It is, therefore, controlled by anticipation. Airway traffic control organizes the movement of aircraft in advance, so that no danger of collision can arise if they proceed in accordance with instructions.

"At airports both surface and air traffic must be kept separated. Airport traffic control provides this separation for taxiing, landing, and departing aircraft. Without it a plane might take off and start its climb directly into the path of one descending to land; or a plane proposing to depart might taxi out onto a runway just as another was landing. Control of aircraft moving on the ground is particularly important, since aircraft are designed so that the pilot has maximum visibility while in flight; while on the ground, in most aircraft, the pilot's visibility is restricted, making it quite difficult to see other aircraft and obstructions quickly enough to avoid collision.

**Advance Planning Necessary**—"In any discussion of air traffic control it is important to keep the distinction between airway and airport traffic control clear. Airway Traffic Control extends out along all the airways crossing the country. It functions by advance planning. Airport Traffic Control is localized to a small zone around an airport. It functions by caring for immediate situations.

**Saves Public's Money**—"Air traffic control in addition to affording protection against accident also functions as an agency to insure full utilization of Government financed facilities." In this connection Mr. Denicke said: "The Government has invested many millions of dollars in establishing airways with their beacons and radio aids. It annually spends millions maintaining these facilities and aeronautical weather service. The airports of the country represent an investment of billions.

"The value of the aircraft themselves runs to ten figures. The efficient utilization of this tremendous

plant requires careful planning. Idle planes, airports not used to capacity, and airways not carrying the traffic of which they are capable represent wasted investment.

"Air traffic control protects against this waste by organizing the movement of traffic so that airports are not waiting for business, and space in the airways is not going idle, while pilots wish to fly.

"The communication facilities used in connection with the control of air traffic can be divided into two main categories—air-ground and point-to-point. The first are used for communicating between the pilots in flight and the ground agencies; the second permit exchange of data between stations on the ground.

"The majority of domestic air-ground communication is done by two-way radiotelephone. Ground stations are operated by the CAA, by military agencies, and by commercial airlines, each giving a specific type of service. Except in a few instances, point-to-point communication between ground stations is by means of landline channels, either teletype or interphone."

## Colonel Joseph E. Boudwin Returns to CAA from Army

Lt. Col. Joseph E. Boudwin has been appointed superintendent of Aircraft and Components branch of the Civil Aeronautics Administration with headquarters in Region 1, New York City.



Col. J. E. Boudwin

Colonel Boudwin was called to active duty in the Army in May 1942 at which time he was acting chief of Flight Engineering and Factory Inspection Division of the CAA. During the war he was stationed at Wright Field, Dayton, Ohio, and was in charge of maintenance and engineering inspection at all A.T.S.C. overhaul depots.

During the First World War Colonel Boudwin was a combat pilot. His connection with the aircraft industry covers more than twenty-five years.

## Swedish Airline Granted Charter By CAB to Operate Service to U. S.

Swedish Intercontinental Airlines, SILA, has been authorized to engage in air transportation of persons, property and mail between Stockholm and Chicago and New York by the Civil Aeronautics Board.

Intermediate points are in areas of the United Kingdom, Eire, Iceland, Greenland, The Azores, Labrador, Newfoundland, and Canada.

The Board said "a foreign air carrier permit should be issued authorizing Swedish Intercontinental to engage in such air transportation so long as a carrier designated by the United States, pursuant to the 1944 Air Transport Agreement, for the route between Stockholm and New York or Chicago, enjoys permission from Sweden to operate the same route." The Board in its North Atlantic decision designated American Overseas Airlines to fly from New York and Chicago to Stockholm.

SILA has been operating charter flights between Stockholm and New York, and from June to November 1945 made some 47 single trips, with cargo including penicillin, medical instruments and steel and approximately 100 passengers.

## Air Carrier Statistics

The Domestic Air Carrier Statistics tables have been omitted from this month's issue of the JOURNAL because of a revision by the Civil Aeronautics Board in its instructions to the air carriers.

This revision provides that the carriers shall report, effective January 1, 1946, all mileage data on the basis of direct airport-to-airport distances in lieu of course-flown distances heretofore in use.

To convert to the new reporting system, the air carriers have been granted additional time in which to file their reports. The resultant "lag" accounts for omission of the statistics in this issue. It is expected that the statistical presentation will be resumed in the April issue.

## North Atlantic Service

(Continued from first page)

The effort will be to establish a world-wide standard between nations for all navigation and communications facilities, weather services, air traffic control, the operation of ground aids and the procedures in search and rescue. PICAQ not being an operating agency, these regional conferences have been called to review and plan operations.

**Small Country Facilities**—One of the decisions to be made at Dublin refers to extensive air facilities necessary in small countries and the expense of operating them. Such facilities might not be especially valuable to the small country in which they are located, but would be essential for safe operation, and the larger countries, such as the United States and the British Empire, both of which are represented in almost every region, will consider their operation, and make recommendations to PICAQ.

**Official Delegation**—The official United States Delegation is composed of: Gerald B. Brophy, U. S. representative on the Provisional International Civil Aviation Organization, Chief of the Mission; Arthur Lebel, State Department; Colonel Lawrence M. Thomas and Major H. W. Percy, War Department; Captain Frank O'Bierne and Captain W. B. Scheibel, Navy Department.

Also Charles I. Stanton, Glen A. Gilbert, L. Ross Hayes, James F. Angier, James L. Kinney, C. P. Burton, and Lloyd H. Simson, of the Civil Aeronautics Administration; Robert D. Hoyt, Civil Aeronautics Board; Lt. Commander Paul A. Smith, Coast and Geodetic Survey; Delbert M. Little, Weather Bureau; William Krebs, Federal Communications Commission; Alan Osbourne, Maritime Commission; D. W. Rentzel, Aeronautical Radio, Inc.; John C. Leslie, Pan-American Airways; T. L. Boyd, American Overseas Airlines; Roger Kruse, Transcontinental and Western Air, Inc.; Donald Nyrop, Air Transport Association.

**Non-official Representatives**—The technical observers are: E. L. White, Federal Communications Commission; Commander A. E. Harned, and Lt. Commander E. C. Phillips, Coast Guard; Captain Frederick A. Berry and Lieutenant Floyd Sandberg, Navy Department; T. L. Bartlett, Aeronautical Radio, Inc.; J. J. Kennyhertz, A. C. Peterson, W. G. Osmun, and E. O. Roberts, Transcontinental and Western Air, Inc.; Captain R. J. Hixson, W. A. Schrader and Robert Hughes, American Overseas Airlines; G. Gow, George Doole, and J. H. Smith, Pan American Airways; Ray Nicholson, Civil Aeronautics Administration; W. Genez, American Overseas Airlines.

Miss Mary Bean and Miss Anne Snyder of the CAA, Mrs. Alice Stahl of the Coast and Geodetic Survey, and Miss Mary E. Houtt, from the office of the U. S. representative to PICAQ, serve as secretaries to the U. S. delegation.

## Personal Flying Important In Maintaining World Leadership

(Continued from page 28)

owners. The need for close in fields would not be so great if you could drive to the field in the airplane, and taxi rates to and from airports would cease to be a factor in flying costs.

**Advantages of Roadable**—"In addition to answering the airport accessibility problem, the roadable airplane also answers another serious problem, that of weather interruptions. An owner can not afford to start out to keep an appointment if there is any possibility of the weather closing in. But, if he could land and continue his trip by highway, he would have to allow only for the possible difference between ground and air time over part of his journey. Recently on a trip to Philadelphia I had to wait two days for the weather to permit take-off on the return trip. Then I got as far as Havre de Grace and had to go back to Wilmington. There I had to abandon the airplane, find transportation to the railroad station and return to Washington by train. Later in the week I had to go back for the airplane. A few experiences like this, which could be avoided with a roadable airplane, will dampen the enthusiasm of any private flier.

"Another problem, which it could answer in part, is lack of hangar space which is now critical and which may remain so for some time due to scarcity of building materials and the likelihood that they will be allocated to other types of construction.

"This problem could be greatly eased if the manufacturers would give us today an airplane with folding wings. The English have been using them for years to save hangar expense. The increase in cost and weight of an airplane which would accompany this change would be small. It is not unlikely that we will be forced to such a development sooner or later because of the limitations of parking space in the downtown air strips.

**Public Interest Great**—The brighter aspects of the picture were cited by Mr. Geisse when he said:

"The interest of the public in flying has been greatly aroused by the phenomenal record of the air services. The Civil Aeronautics Board and Administrator Wright have together greatly reduced the regulations which were hampering the development of personal flying. It is now possible for an individual to buy an airplane, learn how to fly, get his pilot's certificate and operate his plane with only one contact with a Government employee. This is for obtaining a student's permit, and plans are now being laid for eliminating this contact also. You can get your physical examination from your own doctor and a certificate is denied only in the event that you have some condition which suddenly and without warning might cause you to lose your ability to fly. If you can demonstrate your ability to fly, other handicaps are no longer a bar to your securing a certificate.

"Administrator Wright has also created and filled posts of assistants to the regional administrators for the development of personal flying. The sole duty of such assistants is to look after the interests of the private pilot and to foster personal flying in every way possible.

"Mr. Wright has also established an advisory committee for non-scheduled flying and provided a permanent executive secretary to assist in its work. The members of this committee and its new secretary, Mr. Henry Lloyd Child, are all eminently qualified and are doing a splendid job.

"Last, but by no means the least of the bright spots, is the probability that pilots will be offered a national crosscountry rental service, from which they can rent an airplane in one city and turn it in in another. It is my personal opinion that when this step is taken it will be the biggest step forward in the history of personal flying since its inception. It will change flying from a sport to utility."

## CAA and CAB Releases

Copies of CAA releases may be obtained from the CAA Office of Aviation Information. CAB releases are obtainable from the Public Information Section of the Board. Both offices are located in the Department of Commerce Building, Washington 25, D. C.

### Administration

"CAA Proposes Methods to Locate Private Pilots Lost in Wilds"

"Dr. Fuller Resigns CAA to Head New Hampshire Schools"

"CAA Standard Map Markings Being Accepted Internationally"

"CAA Hails Lower Insurance Rate on Spin-Proof Airplane"

"CAA Veterans Resume Duties After Valuable War Service"

"CAA and State Aviation Officials Agree on Federal-State Jurisdiction"

"Change to VHF Facilities to Be Gradual, CAA Promises"

"CAA Will Improve All Airway Aids by Transition to VHF"

"CAA to Establish Training and Maintenance Center at Oklahoma City"

"CAA General Counsel Returns from Service"

"CAA Shows How Folding Wing Planes Can Save Space and Expense"

"Harold Neely, Veteran CAA Official, Dies in Florida"

"Air Cargo"—A Reference List

"Private Flying and U. S. Planes Popular in Brazil, CAA Man Reports"

### Board

"Swedish Intercontinental Airlines (SILA) Granted Foreign Air Carrier Permit"

"CAB Approves International Air Transport Association Conference Resolution"

"Clarence M. Young New Board Member"

"Colonial Airlines Given Newark as Co-terminal with New York"

"Temporary Rate of Mail pay Set for Essair, Inc."

Civil Air Regulation draft releases.

No. 60—Installation of Certain Fire Prevention Equipment on Air Carrier Aircraft

No. 61—Certification Requirements for Flight Radio Operators

No. 62—Certification Requirements for Flight Navigators

No. 63—Certification Requirements for Flight Engineers.

### Southwest Airways Asks Certificate

Southwest Airways Company has applied to the Civil Aeronautics Board for a certificate authorizing scheduled air transportation of persons, property and mail, by conventional and pick-up type aircraft, between the terminal points Phoenix, Ariz., via certain intermediate points, and Douglas, Winslow, Yuma, Ariz., El Paso, Tex., and Las Vegas, Nev. Southwest estimates the total mileage over these routes at 1,327.

### TWA Seeks To Extend Route

Transcontinental and Western has asked the Civil Aeronautics Board for permission to extend its international route to points within the area of the Union of South Africa.

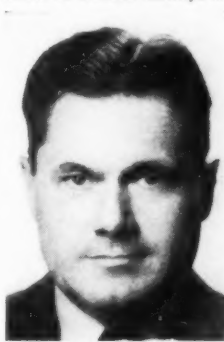
## Kline Succeeds to Bourne Job;

### Young Named Region One Head

William E. Kline, Acting Administrator of the First Region of the Civil Aeronautics Administration in New York, has been appointed Assistant Administrator for Federal Airways by T. P. Wright, Administrator of Civil Aeronautics.

Ora W. Young, formerly Assistant Administrator, has been named Regional Administrator to succeed Mr. Kline.

Mr. Kline will take over the important post of directing the construction and operation of the 36,000 miles of federal airways recently resigned by Thomas B. Bourne who went into private business.



William E. Kline

Kline served in the first World War and joined the air mail service of the Post Office Department in 1920. The air mail employees were transferred to the Bureau of Lighthouses in 1927 and began work on the federal airways, thus Kline has been with the federal government's aviation agency since its inception. One of his first jobs was surveying the airway for transcontinental air mail.

He occupied various jobs, mostly in the airways section of the CAA, and finally became Superintendent of Airways of the Fifth Region at Kansas City, and wartime Regional Administrator. Kline is married and has three children.

Young came with the CAA in 1929 as aeronautical inspector. Most of his work has been in the Safety Regulation service. He was Superintendent of Safety Regulation for the Third Region in Chicago when he went to active service in 1942. Upon his return from service he became Safety Regulation Assistant Administrator of the First Region at New York. He is married and has two children.

## M. Justin Herman is Named

### Head of CAA Flying Training

Appointment of M. Justin Herman as Assistant Administrator for Aviation Training, has been announced by T. P. Wright, Administrator of Civil Aeronautics. Mr. Herman succeeds Bruce Uthus, who resigned to join TWA.

After three years as an officer in the Navy, Mr. Herman returns to the organization where he originally had a major part in pioneering aviation training in the schools. He was instrumental in developing and administering several programs for the preparation of aviation education materials and the installation of courses in secondary schools.

During the war he was attached to the Navy's Office of Industrial Relations and was responsible for several personnel management programs including training in Washington and the field.

A native of New Bedford, Mass., he is a graduate of the University of Rochester and has taken graduate work at Harvard and American University. After several years in private business he came to Washington in 1934 with the Federal Emergency Relief Administration and has been in Government service since that time.

He and his wife and two daughters will make their home in Arlington, Virginia.



## Donald R. Harvey Becomes CAA Personnel Office Head

Donald R. Harvey, who has had long experience in Government personnel work, has been appointed Personnel Officer for the Civil Aeronautics Administration, T. P. Wright, Administrator, announces.

Mr. Harvey was born in Chillicothe, Mo., and attended Chillicothe Business College and Nebraska Wesleyan. He was graduated from the University of Nebraska in 1934 with a BS degree in journalism.

Following his graduation, Mr. Harvey went to work for the Department of Agriculture in Lincoln. He remained there until 1943 in a variety of positions, including Regional Business Manager of the Farm Security Administration and Regional Personnel Officer.

He was appointed to the Bureau of the Budget in 1943 and soon thereafter became Director of Personnel for the Office of War Information—a position he held until he joined the CAA.

Mr. Harvey is married, has a five-year-old son, and lives in Hyattsville, Maryland.

Edward J. Gardner has been appointed Assistant Personnel Officer in the reorganized personnel office.

## Air Agreement

(Continued from first page)

size and operated commercially, as well as minimum facilities that should be required at all commercially operated airports.

During this discussion, the CAA made it clear that the airport specifications in its Airport Design Manual were in no way intended for use as minimums, but rather as guides to planning. In consequence, there was lengthy discussion concerning what minimums should be set up as a guide to state officials charged with licensing airports, especially those smaller than Class 1.

Minimum standards considered included landing strip lengths of 1,500 feet instead of 1,800 feet, glide angles of 15 to 1 instead of 20 to 1, and wind coverage of 60 percent instead of 70 percent. However, no agreement was reached, as it was the consensus that this was a matter that would have to be carefully studied by state officials, the Civil Aeronautics Administration, and other civil aviation interests in order that any nationwide standards that might be agreed to would both safeguard the flying public, and serve to develop the greatest possible number of small airports.

**Airport Requisites**—In regard to facilities required for state licensing, it was the consensus that such items as the following should be required of commercially operated airports: adequate fuel and oil, attendance or availability of a manager and A & E mechanic, tie-downs or hangar space, wind indicator, fire-fighting equipment that meets underwriters' requirements, available airport maintenance and snow removal equipment, telephone, water and restrooms, and first aid kits. The discussion of these facility requirements, incidentally, served to clear up the widespread misunderstanding concerning the temporary closing of the Easton Airport by the Maryland State Aeronautics Commission.

Changes in the 1944 Uniform State Aeronautics Department Act were agreed upon, and the Act was referred to J. M. Hunter of the CAA and Herzel Plaine, Federal-State Division, Department of Justice, for redrafting in accordance with the policies agreed to at the meeting, and for early distribution.

The members of the Legislative Committee, all directors of their state aviation organizations, are: Arthur H. Tully, Jr., chairman, Massachusetts; William L. Anderson, president of NASAO, Pennsylvania; Clarence F. Cornish, Indiana; L. L. Schroeder, Minnesota; David M. Giltinan, West Virginia; Edward F. Knapp, Vermont; Dexter C. Martin, South Carolina; and Edward R. Fennimore, Maryland.

## Guggenheim Medal



Obverse



Reverse

The Daniel Guggenheim Medal, highest aviation honor in the United States, which was awarded for 1945 to Theodore P. Wright, Administrator of Civil Aeronautics, is reproduced in the etching above.

The citation accompanying the award reads: "For outstanding contributions to the development of civil and military aircraft and for notable achievement in assuring the success of our wartime production program."

Also attending were William E. Cullinan, New York; Charles Peyton, New Jersey; Russell Hilliard, New Hampshire; Asa Rountree, Alabama; and Floyd Evans, Michigan, directors of their state commissions.

**CAA Delegation Personnel**—The CAA representatives were headed by William A. M. Burden, Assistant Secretary of Commerce, and consisted of Administrator Wright; Charles B. Donaldson, Assistant Administrator for Airports; Richard Elwell, General Counsel; Glenn D. Woodmansee, Assistant General Counsel; John M. Hunter, Chief, Airport Liaison and Requirement Service; E. J. Robins, Assistant to the Administrator for State Relations; Fred Lanter, Assistant Administrator for Safety Regulations; Howard Rough, Consultant to the Administrator; and George W. Burgess, Assistant to Mr. Burden, who presided.

Two representatives of the Department of Justice, Federal-State Division, who participated are Herzel Plaine and John Andrews.

## C. M. Young Succeeds Dr. Warner on CAB

The nomination of Clarence M. Young as a Member of the Civil Aeronautics Board has been approved by Congress. He will serve the final year, ending December 31, 1946, of the six-year appointment vacated by Dr. Edward P. Warner, who resigned to become President of the Provisional International Civil Aviation Organization.

Mr. Young's aviation career began in the United States Army Air Service in 1917-18. In 1926 he became the Director of Aeronautics for the United States Department of Commerce, and continued in that position until 1929 when he was appointed Assistant Secretary of Commerce for Aeronautics. In 1934 Mr. Young joined Pan American Airways and remained with that company for 11 years as Manager of the Pacific Division. He is a Member of the Royal Aeronautical Society of London and a Member of the Institute of Aeronautical Sciences. He received Transport Pilot's license Number 2 in 1927 and Glider Pilot's license Number 1 in 1929. He holds the rank of Colonel in the U. S. Specialist Reserve Corps.

Mr. Young was born in Colfax, Iowa, on July 23, 1889, and attended Drake University. He received his LL.B. degree from Yale and was admitted to the Iowa Bar in 1910 and practiced law at Des Moines. From 1922 to 1925 he served as Executive Secretary of the Municipal Research Bureau at Des Moines.

Mr. Young maintains legal residence in California. He is married and has one son.

## Harold R. Neely Passes Away In Florida After Long Illness

Harold R. Neely, Administrator of the Third Region, Civil Aeronautics Administration, and a lifelong aviation enthusiast, died in Sarasota, Florida, early in February following a long illness.

Mr. Neely, who was born in Washington, D. C., in 1893, taught flying in World War I as an Army lieutenant, and saw action with a pursuit squadron in France. After the war he was in charge of Washington National Guard flying activities at Spokane Airport.

In July 1928 Mr. Neely was appointed airplane and engine inspector for the CAA, and in 1935 he was promoted to the position of supervising aeronautical inspector.

Mr. Neely was made Administrator of the Third Region, with headquarters in Chicago, in 1938—a position he held until ill health forced his retirement.

## U. S. Planes

(Continued from page 26)

isn't particularly easy in Brazil. The weather is fickle, and lack of towns, roads and railroads makes navigation difficult. A little airfield is sometimes hard to find in a big jungle."

Mr. Tippet, here for a series of conferences, will return to Brazil in a few days. This trip will be one more in a series which has kept him on the move since leaving Bowling Green and Fostoria, Ohio, as a youngster.

At the age of 17 he took flying lessons, and in 1930, two years later, he enlisted in the Army. In 1932, upon the expiration of his enlistment, he went to work for a California aircraft company.

Soon afterward he opened his own flying school, did aircraft engineering work, and at one time was flying by day and panning gold at night as a sideline. In 1937 he was commissioned in the Army and given two years of highly intensive training in almost every phase of flying.

Since joining the CAA in October 1939, Mr. Tippet has piloted a plane over every country of Central and South America.



## Airline Orders

## Service

No. 4375 amends certificates issued to American Overseas Airlines, Transcontinental and Western Air, and Pan American Airways so as to include Baltimore as a co-terminal point on the North Atlantic route; provides that said certificates shall be effective up to and including July 4, 1952. (Issued with an opinion—Dec. 20, 1945)

No. 4427 grants American Overseas Airlines leave to intervene in application of Royal Norwegian Air Transport for a foreign air carrier permit. (Jan. 26)

No. 4428 permits TWA to serve Lisbon, Portugal, on Jan. 21, 1946, through use of Portela de Sacavem Airport. (Jan. 26)

No. 4429 denies application of Pan American Airways for an exemption order from the provisions of sec. 401 of the Civil Aeronautics Act, insofar as they would prevent Pan Am from engaging in transportation to and from Frankfurt, Germany, as an intermediate point on its route to Prague, Czechoslovakia. (Jan. 26)

No. 4430 permits National Airlines to serve New York, N. Y., and Newark, N. J., on Feb. 3, 1946, through use of Newark Municipal Airport. (Jan. 26)

No. 4431 grants the Cities of Buffalo, N. Y., Worcester, Mass., Bradford, Pa., and the County of Luzerne, Pa., leave to intervene in The Middle Atlantic Area Case—Docket 674 et al. (Jan. 26)

No. 4432 grants the Minneapolis-Saint Paul Metropolitan Airports Commission leave to intervene in the application of American Airlines for approval of control of Mid-Continent by American. (Jan. 26)

No. 4433 extends the effective period of the temporary permit held by Royal Dutch Airlines—involving service in the Caribbean area—for 3 months from Jan. 31, 1946. (Jan. 26)

No. 4434 grants Western Air Lines and Challenger Airlines permission to intervene in the application of Arizona Airways and Transcontinental & Western Air; denies petition of United Air Lines for leave to intervene in the same proceeding. (Jan. 26)

No. 4435 rescinds order No. 1771 relating to the temporary suspension of service at Daytona Beach, Fla., by Eastern Air Lines. (Jan. 26)

No. 4436 dismisses application of Russell V. Trader, doing business as Land & Water Air-Service. (Jan. 26)

No. 4438 orders that Continental Air Lines be notified that the national defense no longer requires delaying inauguration of service between the intermediate points Lubbock and Wichita Falls, Tex., and Oklahoma City, Okla., and the terminal point Tulsa, Okla. (Jan. 26)

No. 4432 orders that Pan American Airways be temporarily exempted, on and after Jan. 13, until March 31, 1946, from the terms of its certificate insofar as they would prevent Pan Am from originating and terminating flights at Leopoldville, which flights operate between New York and Leopoldville via Monrovia, Liberia, Lisbon, Portugal, and Foyens, Eire; rescinds Board order No. 3903. (Jan. 28)

No. 4445 extends effective period of temporary permit held by Expreso Aereo Inter-Americano, S. A., for 3 months from Jan. 31, 1946. (Jan. 31)

No. 4446 dismisses application of Aviators Assn. requesting permission to file a petition to reopen the proceeding in Dockets 1345 and 1346. (Jan. 31)

No. 4447 denies application of the Airline Communication Employees Assn. for permission to file a petition to reopen the proceeding in Dockets 1345 and 1346; dismisses application insofar as it requests the Board to assume jurisdiction for the purpose of instituting an independent proceeding. (Jan. 31)

No. 4448 permits Western Air Lines to inaugurate on Feb. 1, nonstop service between Los Angeles, Calif., and Salt Lake City, Utah, on route 13. (Jan. 31)

No. 4449 permits Eastern Air Lines to inaugurate on Feb. 1, nonstop service between Newark, N. J., and Boston, Mass., on routes 5 and 6. (Jan. 31)

No. 4450 denies petition of Plantation Air Lines for reconsideration and revocation of Board order No. 4308 which denied Plantation's request for consolidation of its application in the Kansas City-Memphis-Florida Case. (Feb. 1)

No. 4451 denies motion of Mid-Continent Airlines to dismiss Amendment No. 3 to the application of Eastern Air Lines, Docket 1067, which has been consolidated into the Kansas City-Memphis-Florida Case. (Feb. 1)

No. 4453 dismisses application of Peck and Rice Airways—Docket 1832—for a permanent certificate. (Feb. 4)

No. 4454 dismisses, for lack of prosecution, application of Alaska Flying Service for a certificate. (Feb. 4)

No. 4455 grants the Commonwealth of Mass., the Levy Court of New Castle County, Del., and the Pennsylvania Aeronautics Commission of the State of Pa., leave to intervene in The Middle Atlantic Area Case—Docket 674 et al. (Feb. 4)

No. 4456 permits Delta Air Corp. to resume scheduled service at Tyler, Tex., on Feb. 15, through use of Tyler Municipal Airport. (Feb. 4)

No. 4457 permits Delta Air Corp. to inaugurate immediately, nonstop service between Savannah, Ga., and Jacksonville, Fla., on route 54. (Feb. 4)

No. 4458 permits Transcontinental & Western Air to inaugurate on Feb. 4, nonstop service between Newark, N. J., and Pittsburgh, Pa., and between Newark and Harrisburg, on route 2. (Feb. 4)

No. 4459 grants Alaska Coastal Airlines, Ellis Air Transport and Petersberg Air Service, permission to intervene in application of Alaska Airplane Charter Co. for a certificate. (Feb. 4)

No. 4460 grants petition of Woodley Airways (now Pacific Northern Airlines) for permission to intervene in application of Larson Airlines Distributing Co.—Docket 2035—for a permanent certificate. (Feb. 4)

No. 4461 grants petition of Pacific Northern Airlines and Alaska Airlines for permission to intervene in application of Christen en Air Service—Docket 2036—for a certificate. (Feb. 4)

No. 4462 grants petitions of Pacific Northern Airlines and Alaska Airlines for permission to intervene in application of Lavery Airways—Docket 2037—for a permanent certificate. (Feb. 4)

No. 4463 grants petition of Pacific Northern Airlines for permission to intervene in application of Peninsula Flying Service—Docket 2038—for a permanent certificate. (Feb. 4)

No. 4464 grants petition of Pacific Northern Airlines for permission to intervene in the application of Robert L. Williams—Docket 2040—for a certificate. (Feb. 4)

No. 4465 grants petition of Pacific Northern Airlines for permission to intervene in application of The Kenai Flying Service—Docket 2041—for a certificate. (Feb. 4)

No. 4466 grants petition of Pacific Northern Airlines for permission to intervene in application of Northern Air Service—Docket 2046—for a permanent and/or temporary certificate of exemption therefrom for charter and contract air transportation of persons and property in Alaska. (Feb. 4)

No. 4467 grants petition of Pacific Northern Airlines for permission to intervene in application of Vera Elizabeth Liebel—Docket 2047—for a certificate. (Feb. 4)

No. 4468 grants petition of Pacific Northern Airlines for permission to intervene in application of Jesse R. Carr and Velma E. Carr, a co-partnership doing business as Jack Carr Service—Docket 2049—for a certificate or exemption order allowing applicants to conduct operations as nonscheduled operators in the charter carriage of passengers and freight within the Territory of Alaska. (Feb. 4)

No. 4469 grants petitions of Pacific Northern Airlines and Ray Petersen Flying Service for permission to intervene in application of Leon R. Alsworth—Docket 2120—for a certificate. (Feb. 4)

No. 4470 grants petition of Pacific Northern Airlines for permission to intervene in application of Allen A. McGregor—Docket 2085—for a certificate. (Feb. 4)

No. 4471 grants petition of Pacific Northern Airlines for permission to intervene in application of Kenneth H. Armstrong—Docket 2130—for a certificate. (Feb. 4)

No. 4472 grants petition of Pacific Northern Airlines for permission to intervene in application of Stanley F. Chmiel—Docket 2134—for a certificate. (Feb. 4)

No. 4473 grants petition of Pacific Northern Airlines for permission to intervene in application of Edwin F. Brinkworth—Docket 2134—for a certificate. (Feb. 4)

No. 4474 grants petition of Pacific Northern Airlines for permission to intervene in application of Wood Flying Service—Docket 2161—for a permanent or temporary certificate. (Feb. 4)

No. 4475 denies United Air Lines permission to inaugurate nonstop service on Feb. 16, between New York, N. Y., and Detroit, Mich., points on route 1. (Jan. 28)

No. 4481 dismisses, without prejudice, applications of Aircar Service Co., Kendall W. Everson and John T. Daugherty, Lincoln Air Lines, Inc., Mohawk Lines, Inc., Page Airways, Inc., Public Service Interstate Transportation Co., Rockland Coaches, Inc., Thompson Airways, Inc., and Union Airways, Inc. (Feb. 5)

No. 4482 orders that Swedish Intercontinental Airlines (S.I.L.A.), be issued a foreign air carrier permit, subject to certain conditions, authorizing transportation between the terminal point Stockholm, Sweden, intermediate points in the United Kingdom, Eire, Iceland, Greenland, The Azores, Labrador, Newfoundland, and Quebec, and the alternate terminal points New York, N. Y., and Chicago, Ill. (Issued with an opinion—Jan. 26)

No. 4485 permits Eastern Air Lines to inaugurate on Feb. 4, nonstop service between Newark, N. J., and Washington, D. C., on routes 5 and 6. (Feb. 7)

No. 4486 permits Northeast Airlines to inaugurate on Feb. 1, nonstop service between Boston, Mass., and Bangor, Me., on route 27. (Feb. 7)

No. 4487 permits the Cities of Miami, Fla., and Kansas City, Mo., leave to intervene in the Kansas City-Memphis-Florida Case; denies petition of the City of Tifton, Ga., to intervene in same proceeding. (Feb. 8)

No. 4490 dismisses application of Robert D. Greenley and Sam D. Weil, Jr., for a certificate. (Feb. 8)

No. 4491 grants the Mayor and Council of Wilmington, Del., leave to intervene in the Middle Atlantic Area Case. (Feb. 8)

No. 4492 dismisses applications of Norfolk Northern Airlines, Docket 2151, Empire State Airlines, Docket 1301, and John P. Carey, Docket 1837. (Feb. 8)

No. 4493 dismisses application of William E. Hann for a certificate. (Feb. 8)

No. 4495 grants the City of Galesburg, Ill., leave to intervene in the Great Lakes Area Case. (Feb. 8)

No. 4499 permits American Airlines to inaugurate immediately, nonstop service between El Paso, and Dallas, Tex., on route 4. (Feb. 15)

No. 4500 permits American Airlines to inaugurate immediately, nonstop service between Fort Worth, Tex., and Monterrey, Mexico, on FAN route 26. (Feb. 15)

No. 4502 dismisses, upon the request of Southwest Feeder Airlines, their application for a certificate. (Feb. 15)

No. 4503 grants Alaska Airlines permission to intervene in the application of Robert C. Reeve, doing business as Reeve Airways, for a certificate. (Feb. 15)

No. 4504 permits American Overseas Airlines to inaugurate on or about Feb. 19, service to Amsterdam, Netherlands, through the use of Schiphol Airport. (Feb. 15)

No. 4505 permits the City of Springfield, Mo., and denies the South Carolina Aeronautics Commission, permission to intervene in the Kansas City-Memphis-Florida Case. (Feb. 15)

No. 4506 grants the Cities of Joplin, Mo., and Memphis, Tenn., permission to intervene in the Kansas City-Memphis-Florida Case. (Feb. 15)

No. 4508 grants Wien Alaska Airlines permission to intervene in the application of Lavery Airways for a permanent certificate authorizing Lavery to engage in transportation of persons, property, and mail within the Territory of Alaska, in non-scheduled or charter service with terminal points at Fairbanks, Anchorage and Paxon's Lake, Alaska. (Feb. 15)

No. 4509 grants Wien Alaska Airlines permission to intervene in the application of Arctic Air Service for a permanent certificate authorizing air service of persons, property and mail between Candle, Kotzebue, Noorvik, Selawick, Kianna, Shungnak, Hughes, and Fairbanks and transportation of persons and property over irregular non-scheduled route. (Feb. 15)

No. 4510 grants Ferguson Airways and Northern Cross permission to intervene in the application of Arctic Air Service for a permanent certificate authorizing air service of persons, property and mail between Candle, Kotzebue, Noorvik, Selawick, Kianna, Shungnak, Hughes and Fairbanks and transportation of persons and property over irregular non-scheduled route. (Feb. 15)

No. 4511 permits United Air Lines to inaugurate on Feb. 16, nonstop service between Detroit, Mich., and Youngstown, Ohio, on route 1. (Feb. 15)

No. 4512 permits Alaska Airlines to intervene in the application of Toussaint Air Service for a certificate authorizing transportation of persons, property, and mail within the Territory of Alaska. (Feb. 15)

No. 4513 permits Alaska Airlines to intervene in the applica-

tion of Top O' the World Flying Service for a certificate or exemption order authorizing transportation of persons and property within the Territory of Alaska. (Feb. 15)

No. 4514 grants Alaska Airlines leave to intervene in the application of Martin Air Service for a certificate or exemption order authorizing transportation of persons and property within the Territory of Alaska. (Feb. 15)

No. 4515 directs Essair, Inc., to show cause why the Board should not adopt the findings and conclusions set forth in the Statement of Tentative Findings and Conclusions, and upon this basis fix, determine and publish the temporary mail rate to be paid Essair. (Feb. 15)

No. 4516 dismisses, upon the request of John W. Foreman, his applications for certificates. (Feb. 15)

No. 4517 grants the City of Hartford, Conn., permission to intervene in the Middle Atlantic Area Case. (Feb. 15)

No. 4520 permits American Overseas Airlines to inaugurate on Feb. 19, nonstop service between Shannon, Eire, and Amsterdam, Netherlands. (Feb. 18)

No. 4527 amends certificate authorizing Colonial Airlines to transport persons, property, and mail over route 72 by designating Newark, N. J., as a co-terminal point with New York, N. Y. (Issued with an opinion—Feb. 20)

No. 4529 permits Wisconsin Airways to intervene in the North Central Case—Docket 415 et al.—but denies their petition for consolidation of their application—Docket 2176 into Docket 415 et al.—and for immediate hearing thereon. (Feb. 25)

No. 4530 consolidates applications of Braniff Airways and Chicago and Southern Airlines—Dockets 1154 and 2177—for hearing before a Board examiner. (Feb. 25)

No. 4531 orders that application of Transcontinental and Western Air, for consolidation of route 44 with routes 2, 37, 61, and 67, and the application of American Airlines, for consolidation of routes 30 and 4, and the application of United Air Lines, for consolidation of routes 1 and 11, be consolidated for hearing. (Feb. 25)

No. 4532 denies request of Eastern Air Lines that its application for consolidation of routes 10 and 40 be consolidated with the applications of Braniff Airways, Docket 1154 et al., and Transcontinental and Western Air, Docket 2142 et al. (Feb. 25)

## Miscellaneous

No. 4419 approves application of R. M. Hugin and Railway Express Agency, Inc., for approval of interlocking relationships. (Jan. 17)

No. 4420 approves application of C. B. Rice and Railway Express Agency for approval of interlocking relationships. (Jan. 17)

No. 4421 approves application of Golder Shumate and Railway Express Agency for approval of interlocking relationships. (Jan. 17)

No. 4422 approves application of C. W. Van Horn and Railway Express Agency for approval of interlocking relationships. (Jan. 17)

No. 4426 amends paragraphs 2 and 3 or the ordering paragraphs, Order No. 4340, by deleting these paragraphs and substituting new paragraphs 2 and 3. (Jan. 26)

No. 4437 modifies Board order No. 3210, which concerns the acquisition of control by Hughes Tool Company of TWA, by striking paragraph 3 and substituting a new paragraph 3. (Jan. 26)

No. 4483 approves an agreement by and between Pennsylvania-Central and American Airlines relating to the appointment of a committee to act as the representative of designated carriers in negotiations with the Air Line Pilots Assn., International. (Jan. 31)

No. 4494 grants National Airlines and the State of Minn. permission to intervene in the application of American Airlines for approval of control of Mid-Continent Airlines by American. (Feb. 8)

No. 4498 orders that the certificates heretofore issued to Delta Air Corp. for routes 24 and 54 be reissued to reflect the change in corporate name from Delta Air Corp. to Delta Air Lines. (Feb. 13)

No. 4501 approves an agreement by and between United Air Lines and Northwest Airlines relating to filling and drying Northwest's oxygen bottles at La Guardia Fld. (Feb. 15)

No. 4507 approves an agreement by and between United Air Lines and Pan American Airways relating to refilling and drying Pan American's oxygen bottles at La Guardia Fld. (Feb. 15)

No. 4518 approves an agreement by and between American Airlines and Mid-Continent Airlines relating to the sublease of space for a radio station. (Feb. 18)

No. 4519 orders that the petition of Dennis Fowelson, et al., be granted and that the supplemental brief be received. (Feb. 18)

No. 4521 approves an agreement by and between Pennsylvania-Central Airlines and Transcontinental and Western Air relating to maintenance service for PCA planes at Harrisburg. (Feb. 19)

No. 4522 approves an agreement by and between American Airlines and United Air Lines relating to rental or storage space to United at Hartford. (Feb. 19)

No. 4523 approves an agreement by and between Eastern Air Lines and National Airlines relating to sublease of radio site in Hillsborough County, Fla. (Feb. 19)

No. 4524 approves an agreement by and between United Air Lines and Transcontinental and Western Air relating to drying and refilling TWA's airplane oxygen bottles at La Guardia Fld. (Feb. 20)

No. 4525 approves an agreement by and among American Overseas Airlines, Transcontinental and Western Air, and certain other air carriers and foreign air carriers named therein, relating to the establishment and conduct of regional traffic conferences of the International Air Transport Assn. (Issued with an opinion—Feb. 19)

No. 4526 approves application of Wm. Littlewood, T. C. Drinkwater, and American Airlines for approval of interlocking relationships. (Feb. 20)

No. 4528 approves an agreement by and between Pennsylvania-Central Airlines relating to the establishment and operation of The United States Capital Airlines Ticket Office. (Feb. 25)

## Airman Orders

## Suspensions

No. 4423 suspends private certificate of Forest E. Rippee for 6 months because he flew at altitudes between 30 and 300 ft. in the

(See Official Actions, next page)

(Continued from preceding page)

vicinity of Tampa, Fla., contrary to the provisions of sec. 60.3503 of the Civil Air Regulations. (Jan. 26)

No. 4439 suspends commercial certificate of Walter J. Konantz for 3 months because he operated an aircraft within a control zone, contrary to instructions issued by the control tower operator. (Jan. 26)

No. 4441 suspends private certificate of Donald Tilden for 30 days because there was no registration certificate issued to the owner or no airworthiness certificate or special authorization issued by the Administrator approving its operation carried in the aircraft. (Jan. 26)

No. 4443 suspends student certificate of Wilbert C. Land for 60 days because he induced Waldo B. Adams, who holds a student certificate also, to carry him as a passenger. (Jan. 28)

No. 4478 suspends commercial certificate of Lee P. Davis for 30 days because he flew an aircraft for which there was no currently effective airworthiness certificate. (Feb. 5)

## Regulations

**Admt. 15-1** ..... **Effective Jan. 26, 1946**

§ 15.2015 of the Civil Air Regulations is amended by striking the first and second sentences therein and inserting in lieu thereof the following:

Air carrier airplane rear position lights shall emit an alternate aviation red and aviation white flash repeated at a frequency of 40 cycles a minute, each cycle having characteristics prescribed by the Administrator. \* \* \*

**Reg. 346-A** ..... **Effective Feb. 1, 1946**

Extending the effective period of Special Civil Air Regulation Serial Number 346-DC-4 (C-54E) Type Airplanes—Special Civil Air Regulation Serial Number 346 is amended by striking "February 1, 1946" and inserting in lieu thereof the words "June 1, 1946."

**Reg. 356** ..... **Effective Jan. 15, 1946**

Amendment No. 2 to Sec. 280.1 of the Economic Regulations—Reports of Ownership of Stock and Other Interests by Officers and Directors of Air Carriers.

That part of Form No. ER-1 commencing with the title "Information to be reported" is amended to read as follows:

### Information to be Reported

1. Name and address of reporting individual.  
2. (a) Name of air carrier or air carriers and title of position or positions held therein.

(b) Name of person engaged in any other phase of aeronautics, any common carrier, and any person whose principal business in purpose or in fact is the holding of stock in, or control of, air carriers, other persons engaged in any phase of aeronautics, or common carriers with whom the reporting individual holds a position as officer, director or member together with the title of positions held therein.  
3. Occupation of reporting individual.

4. Except as provided in Paragraphs 5 and 6, four separate schedules, on separate sheets, shall be prepared giving the following information with respect to all shares of stock, bonds, notes and other interests held by the reporting individual, beneficially or otherwise, directly or indirectly, (Schedule A) in any air carrier, (Schedule B) in any person engaged in any phase of aeronautics, (Schedule C) in any common carrier, and (Schedule D) in any person whose principal business in purpose or in fact is the holding of stock in, or control of, air carriers, other persons engaged in any phase of aeronautics, or common carriers.

(a) Name of air carrier, person engaged in any phase of aeronautics, common carrier, or other person described in Schedule (D) above, in which the interest was held;

(b) Classes of stock or type and exact title of Bonds, Notes, or other interests;

(c) Number of shares of each class of stock, or principal amount of bonds, notes, or other interests; and, if any such number of amount constitutes five per centum or more of the total authorized and outstanding class of shares, bonds, notes, or other interests, the percentage which such number or amount bears to the total of the same class, issue or type of interest.  
(d) Par or stated value of stock;

(e) Date of issue of bonds, notes, or interests other than stocks;

(f) Date of maturity of bonds, notes or interests other than stocks;

(g) Interest rate of bonds, notes or interests other than stocks;

(h) Description of conversion rights, if any;

(i) Description of voting rights, if any;

(j) If any of the voting rights of the securities reported are subject to a voting trust, a statement to that effect should appear on the schedule and a copy of the instrument creating such voting trust should be attached. Current information on file with the Board relating to a voting trust may be incorporated by reference.

(k) Date or dates of acquisition;

(l) If disposed of, date or dates of disposition;

(m) Names and addresses of any persons by whom the interest is held for the reporting individual;

(n) Names and addresses of any persons for whom the interest is held by the reporting individual;

(o) If the interest is beneficially owned by the reporting individual together with other persons the nature of the relationship (co-partnership, trust, etc.).

In the case of stock, bonds or other interests traded on national securities exchanges, the information required by items (d) to (j) inclusive, need not be reported, but references should be made to that fact and the name of the exchange given.

5. In the event there has been no change, since the end of the period covered by the preceding report, in the ownership of stock, bonds, notes or other interests required to be reported in any or either of Schedules A, B, C, and D of Paragraph 4 above, the reporting individual may submit in lieu of any or all of such Schedules, an appropriate statement substantially as follows:

No change [except as set forth in Schedule (here indicate appropriate schedule or schedules) attached hereto] has occurred in my ownership of stock, bonds, notes or other interests within the purview of Section 407(c) of the Civil Aeronautics Act of 1938, as amended, since the end of the period

covered by my preceding report for the period ended (insert date) and such report is by this reference incorporated herein and made a part hereof.

6. In the event the reporting individual did not hold during the reporting period, any stock, bonds, notes or other interests required to be reported in any or either of Schedules A, B, C, and D of Paragraph 4 above, an appropriate statement, substantially as follows, may be submitted in lieu of such schedule or schedules.

I did not hold at any time during the period covered by this report, any stock, bonds, notes or other interests directly or indirectly, [here insert the applicable of the following: (A) in any air carrier, (B) in any person engaged in any phase of aeronautics, (C) in any common carrier, and (D) in any person whose principal business in purpose or in fact is the holding of stock in, or control of, air carriers, other persons engaged in any phase of aeronautics, or common carriers]; [and, if applicable] that during said period I held and/or hold securities as fully set forth in Schedule (here indicate appropriate schedule or schedules)].

### Form of Declaration

I hereby declare that this report, including all accompanying schedules and statements, and all documents incorporated herein by reference, has been examined by me and to the best of my knowledge and belief is a true, correct, and complete report, made in good faith, for the period stated, pursuant to Section 280.1 of the Economic Regulations of the Civil Aeronautics Board.

(Date) (Signature)

**Reg. 357** ..... **Effective Jan. 11, 1946**

Amendment No. 2 of Sec. 238.4 of the Economic Regulations is amended in its entirety to read as follows:

Sec. 238.4 of the Economic Regulations—Terms, Conditions and Limitations of Certificates of Public Convenience and Necessity Issued under Sec. 401 of the Act Authorizing Foreign Air Transportation.

Unless the order authorizing the issuance of a particular certificate shall otherwise provide, there shall be attached to the exercise of the privileges granted by each certificate of public convenience and necessity authorizing an air carrier to engage in foreign air transportation issued pursuant to section 401 of the Civil Aeronautics Act of 1938, as amended, the terms, conditions and limitations hereinafter set forth and such other terms, conditions and limitations as may from time to time be prescribed by the Board and approved by the President of the United States.

### I.

If the holder of a certificate authorizing it to engage in foreign air transportation to a general area desires, as part of its approved service plan, to engage in foreign air transportation to a point in such area not then included in its approved service plan, or to cease to engage in foreign air transportation to a point in such area in its approved service plan, such holder shall make a written application to the Board for approval thereof. Such application shall be conspicuously entitled "Application for Change in Approved Service Plan—Foreign Air Transportation," shall clearly describe such point, its location, the segment of the approved service plan to which such point is to be added or from which it is to be removed, and shall set forth the facts relied upon to establish that the proposed change in the approved service plan is in the public interest. At the time such application is filed with the Board, a copy thereof shall be served by the holder upon such persons as the Board may require. After the filing of such application the holder may submit to the Board additional information in support of such application and shall file and serve copies of such additional information in the same manner required in the case of such application. The Board will grant such Application if it finds that such proposed change in the approved service plan is not inconsistent with the public interest.

### II.

If at any time the holder of a certificate desires to render a scheduled non-stop service omitting one or more of the intermediate points served or to be served pursuant to the certificate, and if such non-stop service is not then regularly scheduled by such holder, such holder shall file with the Board written notice of its intention to inaugurate such service. Such notice shall be filed at least 20 days prior to inaugurating such service, shall be conspicuously entitled "Notice of Non-Stop Service in Foreign Air Transportation," and shall fully describe such service. At the time such notice is filed with the Board a copy thereof shall be served by such holder upon such persons as the Board may require: *Provided*, That, subject to the provisions of section 405(e) of the Act, non-stop service may be inaugurated between any two points at any time without the filing of the notice herein prescribed, if, during the twelve months preceding such inauguration, non-stop service was regularly scheduled by such holder between such points during a period of at least 45 days.

Such non-stop service may be inaugurated upon the expiration of 20 days after the filing of such notice unless (1) the Board notifies such holder within said 20-day period that it appears to the Board that such service may adversely affect the public interest, in which event such service shall not be inaugurated unless and until the Board finds, upon application of the holder and after notice and public hearing that the public interest would not be adversely affected by such non-stop service; or (2) such service involves a schedule designated for the transportation of mail and the inauguration of such service on such day would be prohibited pursuant to the provisions of section 405(e) of the Act, in which event the inauguration of such service shall be subject also to said section. The Board may, subject to the provisions of section 405(e) of the Act, permit non-stop service to be inaugurated at any time after the filing of the "Notice of Non-Stop Service in Foreign Air Transportation" herein prescribed whenever the circumstances warrant such action. The holder of a certificate issued pursuant to section 401(c)(1) of the Act, may, subject to the provisions of section 405(e) of the Act, continue to render any non-stop service regularly scheduled on the date of issuance of such certificate, although such non-stop service was not regularly scheduled by the holder on August 22, 1938, if the holder files a "Notice of Non-Stop Service in Foreign Air Transportation" with respect to such service with the Board within thirty days after such date of issuance: *Provided*, That if a direct

straight-line course between the points between which such service is operated appears to involve a substantial departure from the shortest course between such points as determined by the route described in the certificate, and if the Board shall, after notice and public hearing, instituted within 90 days after such date of issuance, find that the public interest would be adversely affected by such service on account of such substantial departure, such service shall thereupon be discontinued: *Provided Further*, That, subject to the provisions of section 405(e) of the Act, non-stop service may be continued between any two points without the filing of the notice herein prescribed if, during the twelve months preceding the date of issuance of the certificate, non-stop service was regularly scheduled by the holder of the certificate between such points during a period of at least forty-five days.

Subject to the provisions of section 405(e) of the Act, non-stop service may be inaugurated between any two points at any time without the filing of the notice herein prescribed if, during the period from June 1, 1941, to May 31, 1942, inclusive, non-stop service was regularly scheduled by such holder between such points during a period of at least 10 days. This authorization shall remain in effect during the present war and thereafter until the Board shall by order declare the authorization terminated.

### III.

If at any time the holder of a certificate is required, in order to comply with any obligation, duty or liability imposed by any foreign country (other than any obligation, duty or liability arising out of a contract or other agreement heretofore or hereafter entered into between an air carrier or any officer or representative thereof and any foreign country) if such contract or agreement shall have been disapproved by the Board as being contrary to the public interest:

(1) to inaugurate scheduled non-stop service omitting one or more of the intermediate points named in the certificate or included in the approved service plan and situated in one or more foreign countries; or

(2) to add a stop at a point not named in the certificate, or not included in the approved service plan, and situated in such foreign country; or

(3) to change the terminal point in such foreign country; such holder shall file with the Board written notice of such requirement. Such notice shall be filed within 20 days after the air carrier shall have been advised of such requirement; shall be conspicuously entitled "Notice of Non-Stop Service Required by Foreign Country," "Notice of Additional Stop Required by Foreign Country," or "Notice of Terminal Change Required by Foreign Country," as the case may be, and shall fully set forth the facts and circumstances relating to such requirement. At the time such notice is filed with the Board a copy thereof shall be served by the holder upon such persons as the Board may require. Such service may be inaugurated immediately upon the filing of such notice and may be continued unless and until the Board, after notice and public hearing, shall disapprove such service as being contrary to the public interest or unless and until the Board shall find after investigation that such requirement of the foreign country is not in effect.

### IV.

If the holder of a certificate desires to serve regularly a point through any airport not then regularly used by such holder, such holder shall file with the Board written notice of its intention to so serve such point, shall be filed at least 30 days prior to inaugurating the use of such airport. Such notice shall be conspicuously entitled "Airport Notice—Foreign Air Transportation," shall clearly describe such airport and its location, and shall state the reasons why the holder deems the use of such airport to be desirable. At the time such notice is filed with the Board a copy thereof shall be served by the holder upon such persons as the Board may require. Subject to the provisions of section 405(e), the use of any such airport may be inaugurated upon the expiration of thirty days after the filing of such notice, unless within said thirty-day period the Board shall serve upon the holder an order directing such holder to show cause why such use should not be discontinued. *Provided*, That, subject to the provisions of section 405(e) of the Act, the Board may permit the use of any airport not then regularly used by such holder, and when the circumstances warrant such action. Upon service of such order such use shall not thereafter be inaugurated except as may be expressly permitted by such order unless and until the Board finds, after notice and public hearing, that the public interest would not be adversely affected by such use.

If at any time the holder of a certificate is required, in order to comply with any obligation, duty, or liability imposed by any foreign country (other than any obligation, duty, or liability arising out of a contract or other agreement heretofore or hereafter entered into between an air carrier or any officer or representative thereof and any foreign country, if such contract or agreement shall have been disapproved by the Board as being contrary to the public interest) to serve regularly a point or points in such foreign country through any airport not then regularly used by such holder, such holder shall file with the Board written notice of such requirement. Such notice shall be filed within twenty days after the air carrier shall have been advised of such requirement; shall be conspicuously entitled "Airport Notice—Foreign Air Transportation—Change Required by Foreign Country"; and shall fully set forth the facts and circumstances relating to such requirement. The use of such airport may be inaugurated immediately upon the filing of such notice and may be continued unless and until the Board, after notice and public hearing, shall disapprove the use of such airport as being contrary to the public interest, or unless and until the Board shall find, after investigation, that such requirement of the foreign country is not in effect.

### V.

It shall be a condition upon the holding of a certificate that any intentional contravention in fact by the holder of the terms of Title IV of the Act or of the orders, rules, or regulations issued thereunder or of the terms, conditions, and limitations attached to the exercise of the privileges granted by the certificate, even though occurring without the territorial limits of the United States, shall, except to the extent that such contravention in fact shall be necessitated by an obligation, duty, or liability imposed by a foreign country, be a failure to comply (See Official Actions, next page)



## Official Actions

(Continued from preceding page)

with the terms, conditions, and limitations of the certificate within the meaning of section 401(h) of the Act.

### VI.

This regulation shall take effect from the date of its approval by the President of the United States.  
By the Civil Aeronautics Board:

Reg. 358 ..... Effective Jan. 11, 1946

Amendment No. 1 of Sec. 238.5 of the Economic Regulations is amended as follows:

Section 238.5 of the Economic Regulations—Filing and Service of Notices Required by Terms, Conditions and Limitations Attached to Certificates of Public Convenience and Necessity Authorizing Interstate and Overseas Air Transportation.

(a) Filing and Service of "Notice of Non-Stop Service." A copy of each "Notice of Non-Stop Service" filed with the Board pursuant to section 238.3 of the Economic Regulations by the holder of a certificate of public convenience and necessity, shall be served upon the following:

(1) The Postmaster General, marked for the attention of the Second Assistant Postmaster General, if the holder's certificate authorizes the transportation of mail;

(2) Each scheduled air carrier which regularly renders service to or from any point named in such certificate;

(3) The chief executive of each point between which the proposed non-stop service is to be operated, as well as the chief executive of each point proposed to be omitted by reason of the non-stop service;

(4) The chief executive of every state, territory or possession in which are situated the points between which the proposed non-stop service is to be operated, as well as the chief executive of every state, territory or possession in which are situated the points proposed to be omitted by reason of the non-stop service, or, if there exists in such state, territory or possession a commission or other agency of the state, territory or possession having jurisdiction of transportation by air, then upon such commission or agency; and

(5) Such other persons as the Board may specially designate in a particular case.

(b) Filing and Service of "Airport Notice." A copy of each "Airport Notice" filed with the Board pursuant to section 238.3 of the Economic Regulations by the holder of a certificate of public convenience and necessity shall be served upon each of the following:

(1) The Postmaster General, marked for the attention of the Second Assistant Postmaster General;

(2) Each scheduled air carrier which regularly renders service to or from the point intended to be served through the proposed airport;

(3) The chief executive of the point intended to be served through the proposed airport;

(4) The chief executive of the city or other political subdivision in which is situated the airport theretofore regularly used;

(5) The chief executive of the city or other political subdivision in which the proposed airport is situated;

(6) The chief executive of the state in which is situated the point intended to be served through the proposed airport, or, if there exists in such state a commission or other agency of the state having jurisdiction of transportation by air, then upon such commission or agency;

(7) The chief executive of the state in which is situated the airport theretofore regularly used, or, if there exists in such state a commission or other agency of the state having jurisdiction of transportation by air, then upon such commission or agency;

(8) The chief executive of the state in which the proposed airport is situated, or, if there exists in such state a commission or other agency of the state having jurisdiction of transportation by air, then upon such commission or agency; and

(9) Such other persons as the Board may specially designate in a particular case.

(c) Manner of Filing and Serving Notices. Service of a copy of a "Notice of Non-Stop Service" or an "Airport Notice" upon any person hereunder may be made by personal service, or by registered mail addressed to such person. Whenever service is made by registered mail, the date of mailing shall be considered as the time when service is made. Each copy of Notice served hereunder shall be accompanied by a letter of transmittal stating that such service is being made pursuant to sections 238.3, as amended, and 238.5 of the Economic Regulations of the Civil Aeronautics Board. An executed original and nine copies of each "Notice of Non-Stop Service" or "Airport Notice" shall be filed with the Board, and each such copy shall be accompanied by a statement to the effect that the air carrier has served a copy thereof upon each person required to be served hereunder. Such statement shall include the names and addresses of the persons upon whom a copy of such Notice was served.

Reg. 359 ..... Effective Jan. 11, 1946

Section 238.7 of the Economic Regulations is hereby made and promulgated as follows:

Sec. 238.7 of the Economic Regulations—Filing and Service of Applications and Notices Required by Terms, Conditions and Limitations Attached to Certificates of Public Convenience and Necessity Authorizing Foreign Air Transportation.

(a) Persons upon whom Papers shall be Served. A copy of each "Application for Change in Approved Service Plan—Foreign Air Transportation", "Notice of Non-Stop Service in Foreign Air Transportation", "Airport Notice—Foreign Air Transportation", "Notice of Non-Stop Service Required by Foreign Country", "Notice of Additional Stop Required by Foreign Country", or "Notice of Terminal Change Required by Foreign Country", as the case may be, filed with the Board pursuant to section 238.4 of the Economic Regulations by the holder of a certificate of public convenience and necessity, shall be served upon the following:

(1) The Postmaster General, marked for the attention of the Second Assistant Postmaster General, if the holder's certificate authorizes the transportation of mail;

(2) The Secretary of State, marked for the attention of Chief, Aviation Division;

(3) In the case of an "Application for Change in Approved Service Plan—Foreign Air Transportation", each scheduled air

## AIR REGULATIONS . . . As of March 1, 1946

TITLE	PART No.	PRICE		DATE LATEST EDITION		No. AMENDMENTS ISSUED	
		Part	Manual	Part	Manual	Part	Manual
<b>Aircraft</b>							
Airworthiness Certificates.....	01	\$0.05	None	10/15/42	None	1	
Type and Production Certificates.....	02	.05	\$0.10	3/1/41	3/15/45		
Airplane Airworthiness—Normal, Utility, Aerobatic, and Restricted Purpose Categories.....	03 <sup>1</sup>	Free	None	11/13/45	None		
Airplane Airworthiness.....	04	.15	.45	11/1/43	7/1/44	3	1
Airplane Airworthiness Transport Categories.....	04-0 <sup>1</sup>	Free	None	11/9/45	None		
Engine Airworthiness.....	13	.05	None	8/1/41	None		
Propeller Airworthiness.....	14	.05	No stock	7/15/42	6/1/45	1	
Equipment Airworthiness.....	15	Free	No stock	4/15/44	7/1/38	1	
Radio Equipment Airworthiness.....	16	.05	No stock	2/13/41	2/13/41		1
Maintenance, Repair, and Alteration of Aircraft, Engines, Propellers, Instruments.....	18	.05	.50	9/1/42	6/1/43		
<b>Airmen</b>							
Pilot certificates.....	20	.05	None	7/1/45	None	1	
Airline Pilot Rating.....	21	.05	None	10/1/42	None	3	
Lighter-than-air Pilot Certificates.....	22	.05	None	10/15/42	None		
Mechanic Certificates.....	24	.05	None	7/1/43	None	1 <sup>8</sup>	
Parachute Technician Certificates.....	25	.05	None	12/15/43	None	1	
Traffic Control Tower Operator Certificates.....	26	.05	None	10/10/45	None		
Aircraft Dispatcher Certificates.....	27	.05	None	10/1/43	None	3 <sup>4</sup>	
Physical Standards for Airmen.....	29	.05	None	6/1/42	None	3	
<b>Operation Rules</b>							
Air Carrier Operating Certification.....	40	.10	None	10/10/44	None	2 <sup>5</sup>	
Scheduled Air Carrier Operations Outside Continental U. S.....	41	Free	None	9/1/45	None		
General Operation Rules.....	43	.05	None	7/1/45	None	4	
Foreign Air Carrier Regulations.....	44	.05	None	7/1/45	None		
Transportation of Explosives and other Dangerous Articles.....	49	.05	None	7/1/45	None		
<b>Air Agencies</b>							
Flying School Rating.....	50	.05	Free	11/1/40	12/40	3	2
Ground Instructor Rating.....	51	.05	None	12/15/43	None	1	
Repair Station Rating.....	52	.05	Free	10/1/42	2/41		
Mechanic School Rating.....	53	.05	No stock	8/1/42	5/40		
Parachute Loft Certificates and Ratings.....	54	.05	None	1/21/43	None		
<b>Air Navigation</b>							
Air Traffic Rules.....	60	.05	.15	8/1/45	10/45	1 <sup>6</sup>	
Scheduled Air Carrier Rules.....	61	.10	None	2/1/44	None	5 <sup>7</sup>	
<b>Miscellaneous</b>							
Rules of Practice Governing Suspension and Revocation Proceedings.....	97	Free	None	7/6/45	None		
Definitions.....	98	.05	None	10/15/42	None		
Mode of Citation.....	99	Free	None	11/15/40	None		
<b>Regulations of the Administrator</b>							
Aircraft Registration Certificates.....	501	Free	None	3/31/43	None		
Recordation of Aircraft Ownership.....	503	Free	None	3/31/43	None		
Notice of Construction or Alteration of Structures on or near Civil Airways.....	525	Free	None	7/23/43	None		
Seizure of Aircraft.....	531	Free	None	12/8/41	None		
Reproduction and Dissemination of Current Examination Materials.....	532	Free	None	1/15/43	None		

<sup>1</sup> Certain aircraft may comply with the provisions of this part or the 11/1/43 edition of Part 04. <sup>2</sup> Special regulations 333 and 333A. <sup>3</sup> Special regulations 340 and 340A. <sup>4</sup> Special regulation 355. <sup>5</sup> Special regulations 319, 319C and 361. <sup>6</sup> Special regulation 351. <sup>7</sup> Special regulations 323A, 323B and 361.

Note: Those parts and manuals for which there is a price are obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Remittances should be by check or money order, payable to the Superintendent. Currency is sent at sender's risk. Amendments and free Parts are obtained from the Publications Section, Civil Aeronautics Board, Washington 25, D. C.; free Manuals and Regulations of the Administrator from the CAA Office of Aviation Information, Dept. of Commerce, Washington 25, D. C.

carrier which is authorized to serve the same general area in which is situated the point to which the holder, as part of its approved service plan, desires to engage, or to cease to engage, in foreign air transportation; and also each scheduled air carrier which is authorized to serve a general area contiguous to the general area wherein such point is situated;

(4) In the case of an "Airport Notice—Foreign Air Transportation", each scheduled air carrier which regularly renders service to or from the point intended to be served through the proposed airport;

(5) In the case of a "Notice of Non-Stop Service in Foreign Air Transportation" or "Notice of Non-Stop Service Required by Foreign Country", each scheduled air carrier which regularly renders service to or from any point (not located in the Continental United States) named in such certificate or located in a general area the holder is authorized by such certificate to serve;

(6) In the case of a "Notice of Additional Stop Required by Foreign Country" or "Notice of Terminal Change Required by Foreign Country", each scheduled air carrier which regularly renders service to or from such additional stop or new terminal point, as the case may be; and

(7) Such other persons as the Board may specially designate in a particular case.

(b) Manner of Filing and Serving Papers. Service of a copy of an application or notice upon any person pursuant to this section may be made by personal service, or by registered mail addressed to such person. Whenever service is made by registered mail, the date of mailing shall be considered as the time when service is made. Each copy of a notice, served pursuant to this section shall be accompanied by a letter of transmittal stating that such service is being made pursuant to sections 238.4 and 238.7 of the Economic Regulations of the Civil Aeronautics Board. An executed original and nine copies of each such notice shall be filed with the Board, and each such copy shall be accompanied by a statement to the effect that the air carrier has served a copy thereof upon each such person required to be served hereunder. Such statement shall include the names and addresses of the persons upon whom a copy of such notice was served.

Reg. 360 ..... Effective March 1, 1946

Approvals of Interlocking Relationships—Amendment No. 2 of Section 248.1 of the Economic Regulations. Effective March 1, 1946, paragraphs (6) and (9) of subsection (c) of Section 248.1 of the Economic Regulations are hereby amended to read, respectively, as follows:

(8) With respect to the individual applicant, a statement that the information contained in the most recent report filed by him with the Board pursuant to Section 280.1 of the Economic Regulations is the same as of the date within 30 days of the filing of the application pursuant to this regulation, or, if such information has changed, a statement setting forth the details of such changes; and with respect to each officer and director of each air carrier applicant other than the individual applicant, a statement that there is presently on file with the Board a report pursuant to Section 280.1 of the Economic Regulations for each such individual officer or director. If no such report is on file with reference to any such officer or director (including the individual applicant), it shall be filed concurrently with the application pursuant to this regulation.

(9) The names (a) of the largest stockholders, not exceeding twenty, who hold 1 per centum or more of the voting capital stock of any air carrier applicant and (b) of the largest stockholders, not exceeding twenty, who hold 1 per centum or more of the voting capital stock of any person with whom an interlocking relationship is sought by such application to be approved; together with the number of shares of each class of stock held by each of such stockholders and the percentage which such shares bear to the total number of shares of the same class authorized and outstanding. If all or any part of such shares are held for the account of any person other than the holder, the names of such persons shall be disclosed. If the applicant, after making all reasonable efforts, is unable to obtain disclosure of such information with respect to any of the persons classified under (b) in the first sentence of this paragraph, the application shall state specifically the efforts made to obtain such information and the reasons why such efforts were unsuccessful.

## Will Rogers Airfield Selected as Training, Maintenance Center

Will Rogers Field at Oklahoma City has been chosen, after careful appraisal of several sites, as the location for several important Civil Aeronautics Administration activities, T. P. Wright, Administrator, announces.

**To be Moved at Once**—Among the units which may be moved to Oklahoma City in the immediate future are the Standardization Center, which gives special training to CAA inspectors; the General Aircraft Maintenance Base for the Midwest, which is planned to service CAA planes; and the Signals Division school, which teaches the newest developments in radio and teletype to CAA personnel who maintain national airway navigation aids.

The Will Rogers Field was chosen because of its convenient geographical location, good airfield facilities, excellent flying weather and the facilities for efficient and economical centralization of all CAA training activities, Mr. Wright said. The immediate availability of the field was another important factor in the choice. The Oklahoma field has three runways more than 5,100 feet in length, and is now in use by both Army Air Forces and commercial airlines.

**City to Construct Buildings**—Oklahoma City has agreed to build for the CAA an administration building and two new hangars. These buildings, in addition to those to be left at the field by the Army, including generous warehouse space, will make possible considerable saving of the Government's money for this essential and important civil aviation activity.

Oklahoma City has agreed to maintain the field and construct necessary buildings not already situated there, and to assist in moving equipment for the Standardization Center from its present location.

The Standardization Center was established in February 1941 to fill an urgent need for specialized training of CAA inspectors. The inspectors had long experience in their fields before joining the CAA, but the rapid progress of aviation made it essential for them to keep up to date on new developments in the increasingly complex field.

**To Standardize Procedure**—Another purpose of the Center—and one which gives it its name—is to standardize the inspection procedure. The inspectors, on whom the safety of air travel depends, must grade aviation personnel on various skills and rate airplanes on their airworthiness. The Center teaches standard methods of testing and inspection so that a given grade has equal weight in any part of the country.

Inspectors from the various CAA districts are rotated for brief periods at the Center. In addition to reviewing inspection methods and new developments in aviation, they get actual experience in using the newest multi-engine planes and navigation equipment so that they can intelligently grade pilots and planes under actual operating conditions.

Immediate plans call for operating the Signals Division school at Oklahoma City. Eventually, Mr. Wright said, it is hoped to put all the Federal Airways schools and similar CAA activities in this central location.

### Seeks To Suspend Service

Wien Alaska Airlines, Fairbanks, Alaska, and Ferguson Airways, Kotzebue, Alaska, have applied to the Civil Aeronautics Board for an exemption order which will authorize Ferguson Airways to suspend service and permit Wien Airlines to operate in its stead.

## CAA Publication Deals Clearly With Navigation

# PATH OF FLIGHT

## TAKES THE AGGRAVATION OUT OF NAVIGATION



"Path of Flight," a simple and practical explanation of navigation fundamentals for the private pilot, has just been published by the Office of Aviation Information, Civil Aeronautics Administration.

Available for 40 cents from the Superintendent of Documents, Government Printing Office, the new booklet contains 30 illustrations in color and a sample aeronautical chart.

**Ground Covered**—The text by George Sidney Stanton, now Chief of the CAA Examination Section, covers eight main topics—aims to navigation, measurement of direction, basic calculations, chart reading, cross-country flying by pilotage, the wind triangle, the radius of flight, and special problems.

"Path of Flight" is one of a series of publications by the Office of Aviation Information designed par-

ticularly to help the new pilot acquire, with a minimum of effort, the knowledge necessary to safe flying. Other publications which will be issued in the series are "Realm of Flight," dealing with the elements of meteorology, and a publication tentatively titled "Facts of Flight."

**Similar Publication**—Until the publication of "Path of Flight," only available government manual on the subject was "Practical Air Navigation," a comprehensive treatment of the subject selling for one dollar. The latter is recommended for those wishing to make a more detailed study of air navigation.

With the recent amendments to the Civil Air Regulations dropping the requirement of a written examination on navigation and meteorology, it was felt that private pilots should be encouraged to acquire voluntarily some basic information on these subjects. The new series of booklets, clearly written and attractively illustrated, was prepared for this purpose.

### New CAR Part 33 Proposed;

#### Board Seeks Public Reaction

The opinion of interested persons on a proposed new Part 33 of the Civil Air Regulations which provides for the certification of flight radio operators is sought by the Civil Aeronautics Board. Comments and recommendations should be forwarded to the Board, Commerce Building, Washington 25, D. C., on or before May 1.

The proposed new Part 33 of the Regulations, Flight Radio Operator Certificate, prescribes substantially the same minimum requirements which were developed in collaboration with the aviation industry in May 1945, and which are being presented to the Provisional International Civil Aviation Organization now in session at Montreal, as the United States recommendation for use as international standards.

At the present time this airman certificate is required only for implementing the regulations applying to our air carriers engaged in scheduled air transportation outside the United States. However, the adequacy of the proposed regulations as applied to scheduled operations within the United States should also be considered as the employment of larger transport aircraft and the authorization of long range flights in our domestic scheduled operations may soon make it necessary to require such airman to be included in the crew on some of the domestic air carrier operations.

### To Drop Intermediate Stop

Pan American Airways has petitioned the Civil Aeronautics Board for permission to eliminate Cat Cay, Bahama Islands, as an intermediate stop on its route between Miami, Fla., and Nassau.



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